Panasonic

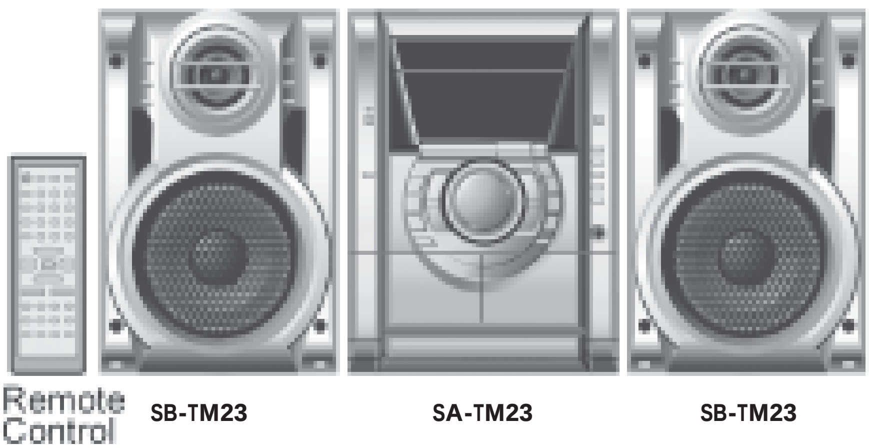
ORDER NO. MD0411547C1

A6

Service Manual

SC-TM23

MODEL	UNIT	
SC-TM23	SA-TM23 SB-TM23	STEREO FRONT SPEAKER



Specifications

Potencia de salida		
SC-TM 23	Frontal	90W RCM por canal (5Ω) 1kHz, 10% DAT

Amplificador	SA-TM23
Potencia de salida	2000 W (P.M.P.O)
Consumo de potencia	145 W
Alimentaciòn	127 V ca ±10% 60 Hz
Sencibilidad Aux:	250 mV
Rango de sintonìa AM:	520-1710MHz (paso de 0,2 MHz)
Rango de sintonìa FM:	87.9-107.9 MHz (paso de 0,2 MHz 87.5-108.0 MHz (paso de 0,1 MHz
Dimensiones (b x h x l)	250 mm x 330 mm x 320mm
Peso:	6.4 kg aprox

Bafles	SB-TM23
FRONTAL Bocina Super Tweeter Bocina Tweeter Bocina Woofer	 - - - - - - 6 cm 16 cm
IMPEDANCIA Frontal Alto Bajo	 5 Ω - - - - - - - - - - - -
Dimensiones (b x h x l)	220 mm x 330 mm x 201mm
Peso:	2.7 kg aprox.

Notes: Specifications are subject to change without notice. Mass and dimensions are approximate.Total harmonic distortion is measured by the digital spectrum analyzer.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potencial dangers in attemping to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Contents

1 Safety Precaution

(This “Safety Precaution” is applied only in U.S.A.)Before servicing, unplug the power cord to prevent an electric shock.

When replacing parts, use only manufacturer’s recommended components for safety.

Check the condition of the power cord. Replace if wear or damage is evident.

After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.

Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test

to prevent the customer from being exposed to a shock hazard.

1.1 Insulation Resistance Test

Unplug the power cord and short the two prongs of the plug with a jumper wire.
Turn on the power switch.
Measure the resistance value with ohmmeter between the jumper AC plug and each exposed metal cabinet part, such as screwheads, antenna, control shafts, handle brackets, etc.Measure the resistance value with ohmmeter between the jumper AC plugand each exposed metal cabinet part, such as screwheads, antenna, control shafts, handle brackets, etc.

Equipment with antenna terminals should read between 2.7M˜ and 3.9M˜ to all exposed parts*. (Fig.1)
Equipment without antenna terminals should read approximately infinity to all exposed parts. (Fig.2)
*Note : Some exposed parts may be isolated from the chassisby design. These will read infinity.
If the measurement is outside the specified limits, there is a possibility of a shock hazard. The equipment should be repaired and re-checked before it is returned to the customer.

Fig.1

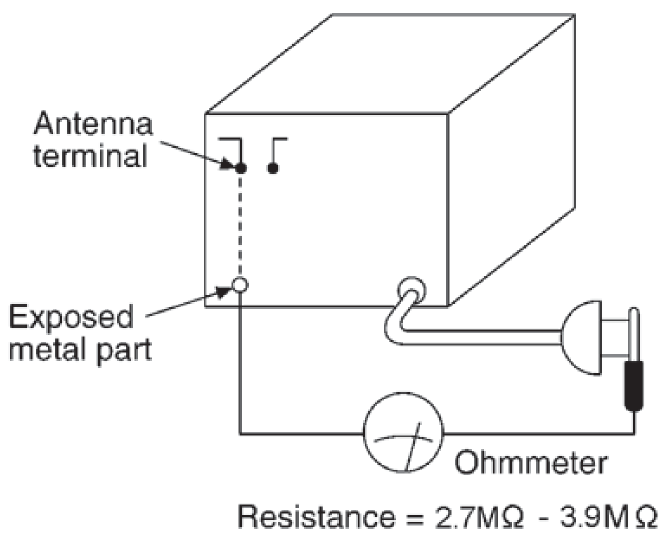
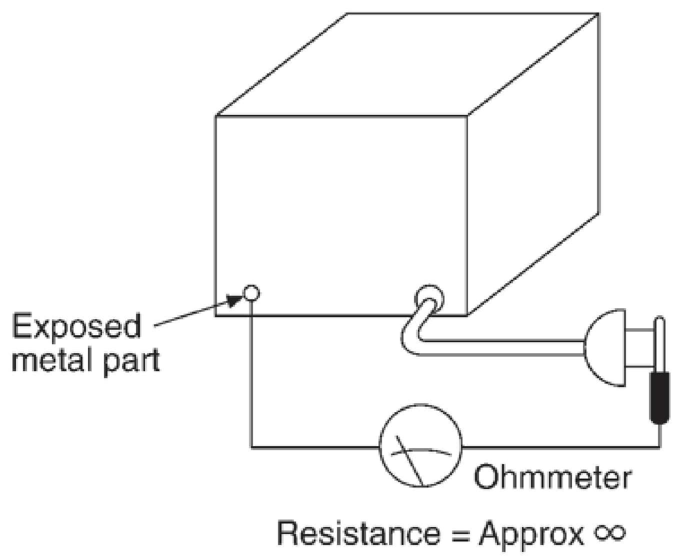


Fig.2



1.2 Caution for fuse replacement

(For English)
CAUTION:

Replace with the same type fuse:
(Manufacturer: LITTELFUSE, INC, Type: F1, 2.5A, 125V)

(For Canadian French)
ATTENTION:

Utiliser un fusible de rechanche de méme type:
(Manufacturer: LITTLEFUSE, INC, Type: F1, 2.5A, 125V)

2 Before Repair and Adjustment

Disconnect AC power, discharge Power Supply Capacitors C5820 and C5840 through a 10Ω, 5W resistor to ground.
DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices.
After repairs are completed, restore power gradually using a variac, to avoid overcurrent.
Current consumption at AC 120V, 60 Hz in NO SIGNAL mode (volume min at CD mode) should be ~600mA.

3 Protection Circuitry

The protection circuitry may have operated if either of the following conditions are noticed:

- No sound is heard when the power is turned on.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are
“shorted”, or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.
If this occurs, follow the procedure outlines below:

1.Turn off the power.
2.Determine the cause of the problem and correct it.
3.Turn on the power once again after one minute.

Note :
When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

4 Prevention of Electro Static Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistorsand semiconductor “chip” components. The following techniques should be used to help reduce the incidence of component damage caused by electro static discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equiped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, whichshould be removed for potential shock reasons prior to applying power to the unit under test.

2. After removing an electrical assembly equiped with ES devices, place the assembly on a conductive surface such as aluminium foil, to prevent electrostatic charge build up or exposure of the assembly.

3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.

4. Use only an anti-static solder remover device. Some solder removal devices not classified as “anti-static (ESD protected)” can generate electrical charge to damage ES devices.

5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.

6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminium foil orcomparable conductive material).

7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

Caution
Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize body motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient todamage an ES device).

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety.
These parts are marked by ⚠ in the schematic diagrams, Exploded Views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer´s specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

5 Handling the Lead-free Solder

5.1 About lead free solder (PbF)

Distinction of PbF P.C.B.:
P.C.B.s (manufactured) using lead free solder will have a PbF stamp on the P.C.B.

Caution:

・ Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a high temperature soldering iron. In case of soldering iron with temperature control,please set it to 700 ± 20°F (370 ± 10°C).

・ Pb free solder will tend to splash when heated too high (about 1100°F/600°C).

・ When soldering or unsoldering, please completely remove all of the solder on the pins or solder area, and be sure to heat the soldering points with the Pb free solder until it melts enough.

6 Handling Precautions For Traverse Deck

The laser diode in the traverse deck (optical pickup) may break down due to potential difference caused by static electricity of clothes or human body.
So, be careful of electrostatic breakdown during repair of the traverse deck (optical pickup).

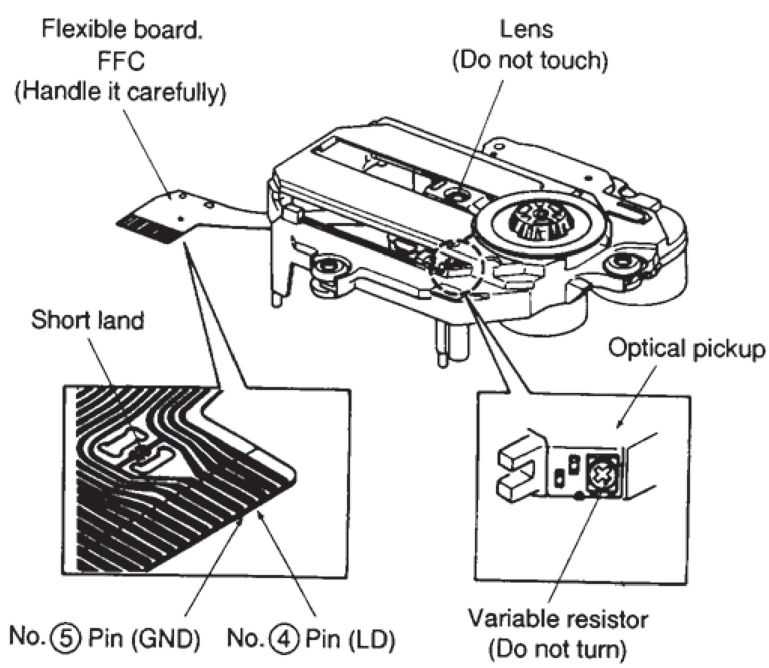
- Handling of traverse deck (optical pickup)

1. Do not subject the traverse deck (optical pickup) to static electricity as it is extremely sensitive to electrical shock.

2. To prevent the breakdown of the laser diode, an antistatic shorting pin is inserted into the flexible board (FFC board).

3. Take care not to apply excessive stress to the flexible board (FFC board). When removing or connecting the short pin, finish the job in as short time as possible.

4. Do not turn the variable resistor (laser power adjustment). It has already been adjusted.



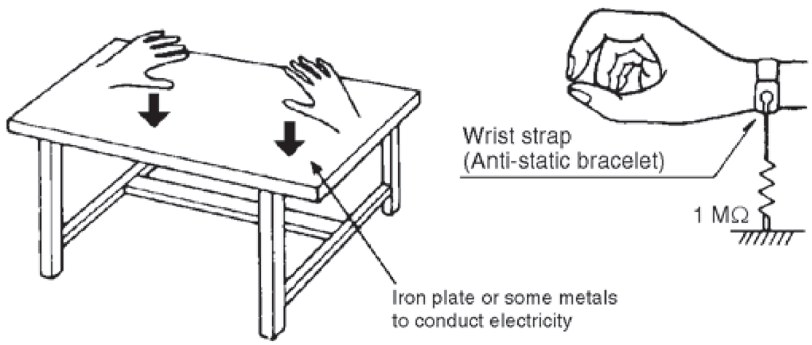
Grounding for electrostatic breakdown prevention

1. Human body grounding
Use the anti-static wrist strap to discharge the static electricity from your body.

2. Work table grounding
Put a conductive material (sheet) or steel sheet on the area where the traverse deck (optical pickup) is place, and ground the sheet.

Caution :
The static electricity of your clothes will not be grounded through the wrist strap. So, take care not to let your clothes touch the traverse deck (optical pickup).

Caution when replacing the Traverse Deck
The traverse deck has a short point shorted with solder to protect the laser diode against electrostatics breakdown. Be sure to remove the solder from the short point before making connections.



7 Precaution of Laser Diode

CAUTION:

This unit utilizes a class 1 laser.

Invisible laser radiation is emitted from the optical pickup lens.

Wavelength: 780nm

When the unit is turned on:

1. Do not look directly into the pick up lens.
2. Do not use optical instruments to look at the pick up lens.
3. Do not adjust the preset variable resistor on the pickup lens.
4. Do not disassemble the optical pick up unit.
5. If the optical pick up is replaced, use the manufacturer's specified replacement pick up only.
6. Use of control or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CAUTION!

THIS PRODUCT UTILIZES A LASER.USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN
MAY RESULT IN HAZARDOUSRADIATION EXPOSURE.

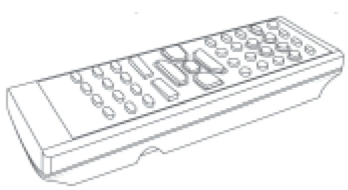
Use of caution label (Except for U.S.A.)



Inside of product

8 Accessories

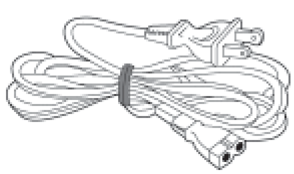
Remote Control
EUR7710020
(1 Pc)



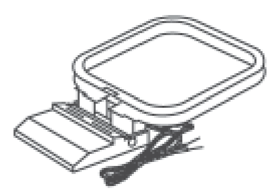
FM Antenna
RSA0006-L
(1 Pc)



AC Cord
SJA168-1A
(1 Pc)

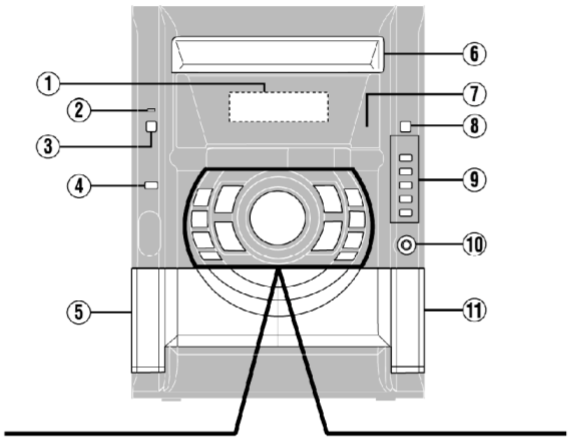


AM Loop Antenna
N1DAAAA00001
(1 Pc)

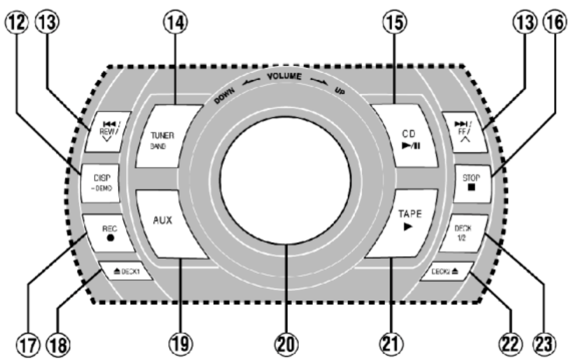


Front panel controls

Main unit



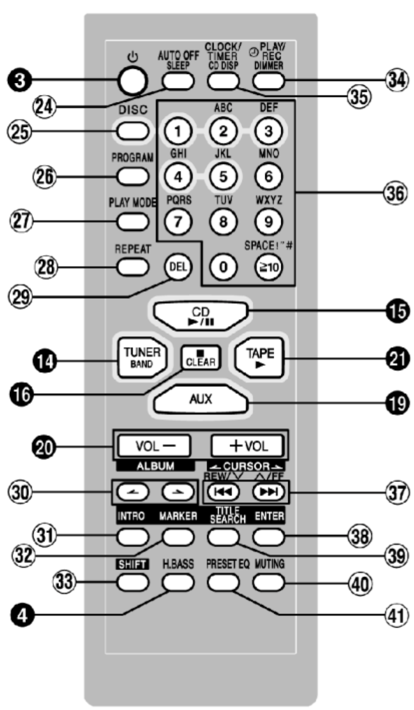
① **Display**
② **AC supply indicator [AC IN]**
This indicator lights when the unit is connected to the AC power supply.
③ **Standby/on switch [⏻/I, POWER]**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
④ **H.BASS button [H.BASS]**
⑤ **Deck 1 cassette holder**
⑥ **Disc tray**
⑦ **Remote control signal sensor**
⑧ **CD tray open/close button [≜, OPEN/CLOSE]**
⑨ **CD direct play buttons [1 ~ 5]**
⑩ **Headphone jack [PHONES]**
⑪ **Deck 2 cassette holder**



Center console

⑫ **Display, demonstration button [DISP, –DEMO]**
⑬ **CD skip/search, tape fast-forward/rewind, tune/preset channel select, time adjust buttons [I◄◄/REW/∨, ►►I/FF/∧]**
⑭ **Tuner/band select button [TUNER, BAND]**
⑮ **CD play/pause button [►/II, CD]**
⑯ **Stop/program clear button [■, STOP]**
⑰ **Record button [●, REC]**
⑱ **Deck 1 open button [≜ DECK1]**
⑲ **AUX button [AUX]**
⑳ **Volume control [VOLUME DOWN, UP]**
㉑ **Tape play button [►, TAPE]**
㉒ **Deck 2 open button [DECK2 ≜]**
㉓ **Deck select button [DECK 1/2]**

Remote control



Buttons such as ❸ function in exactly the same way as the buttons on the main unit.

㉔ **Sleep timer + Auto off button [SLEEP, AUTO OFF]**
㉕ **Disc button [DISC]**
㉖ **Program button [PROGRAM]**
㉗ **Play mode select button [PLAY MODE]**
Use this for selecting CD play mode, tune mode, FM mode and deck select.
㉘ **Repeat button [REPEAT]**
㉙ **Delete button [DEL]**
㉚ **Album skip buttons [⌃, ⌄, ALBUM]**
㉛ **Intro button [INTRO]**
㉜ **Marker memory/recall button [MARKER]**
㉝ **Shift button [SHIFT]**
To use functions labeled in orange ※:
While pressing [SHIFT], press the corresponding button.
※ For buttons [AUTO OFF], [CLOCK/TIMER] and [⏲PLAY/REC]
㉞ **Dimmer + Play timer/record timer button [DIMMER, ⏲PLAY/REC]**
㉟ **CD display + Clock/timer button [CD DISP, CLOCK/TIMER]**
㊱ **Numbered, character buttons [≧10, 1–9, 0, A-Z, SPACE!"#]**
㊲ **CD skip/search, tape fast-forward/rewind, tune/preset channel select, time adjust, cursor buttons [I◄◄, REW/∨, ⌃ CURSOR, ►►I, ∧/FF, CURSOR ⌄]**
㊳ **Enter button [ENTER]**
㊴ **Title search mode select button [TITLE SEARCH]**
㊵ **Muting button [MUTING]**
㊶ **Preset EQ select button [PRESET EQ]**

Disc information

Disc selection

This unit can play MP3 and CD-DA (digital audio) format audio CD-R and CD-RW that have been finalized (a process that enables CD-R/CD-RW players to play audio CD-R and CD-RW) upon completion of recording.
It may not be able to play some CD-R or CD-RW due to the condition of the recording.

Disc type	Logo	Indication used in instructions
Audio CD	COMPACT disc DIGITAL AUDIO	CD
CD-R/RW	–	CD MP3 (Depending on the recording format ➡ see above)

Do not:
- use irregularly shaped discs.
- attach extra labels and stickers.
- use discs with labels and stickers that are coming off or with adhesive exuding from under labels and stickers.
- attach scratch proof covers or any other kind of accessory.
- write anything on the disc.
- clean discs with liquids. (Wipe with a soft, dry cloth.)
- use discs printed with label printers available on the market.



To prevent damage

Always observe the following points:
- Load only 1 disc on the tray.
- Always stop the changer before loading or changing discs. Do not change discs while a disc is playing.
- Set the system on a flat, level surface.
- Always unload all discs before moving the unit.

Do not:
- set the unit on top of magazines, inclined surfaces, etc.
- move the unit while a tray is opening/closing, or when loaded.
- put anything except a disc in the tray.
- use cleaning discs or discs which are badly warped or cracked.
- disconnect the AC power supply cord from the household AC outlet during disc changing operation.

MP3 information

This unit can play MP3 files recorded on CD-R/RW with a computer.
Files are treated as tracks and folders are treated as albums.
This unit can access up to 999 tracks, 255 albums and 20 sessions.

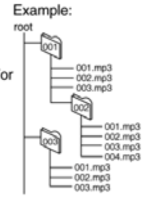
When making MP3 files to play on this unit

Disc format
Discs must conform to ISO9660 level 1 or 2 (except for extended formats).

File format
MP3 files must have the extension ".MP3" or ".mp3".

To play in a certain order
Prefix the folder and file names with 3-digit numbers in the order you want to play them.
Files may not be recorded in numbered order if the prefixes have different numbers of digits. For example: 1track.mp3, 2track.mp3, 10track.mp3.
However, some writing software may also cause recording to occur in a different order.

Example:



MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia.

Limitations on MP3 play
- This unit is not compatible with packet-write format.
- When both MP3 and CD-DA data is recorded on the disc over a number of sessions:
  - If the first session contains MP3 recordings, the unit will play from the MP3 made in that session till the session before the first CD-DA recordings.
  - If the first session contains CD-DA recordings, the unit will play only the recordings made in that session. The subsequent sessions will be ignored.
- Some MP3 may not be played due to the condition of the disc or recording.
- Recordings will not necessarily be played in the order you recorded them.
- Lower case letters will be displayed as upper case.

10 Disassembly and Assembly of Main Component

"ATTENTION SERVICER"
Some chassis components may have sharp edges. Be careful when disassembling and servicing.

1.-This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.

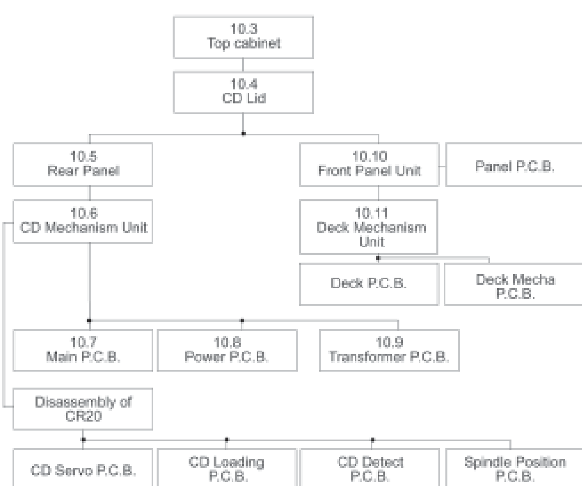
2.-For reassembly after operation checks or replacement, reverse the respective procedures.
Special reassembly procedures are described only when required.

3.-Select items from the following index when checks or replacement are required.

4.-Refer to the Parts No. on the page of "Main component Replacement Procedures", if necessary.

10.1 Disassembly flow chart

The following chart is the procedure for disassembling the casing and inside parts for internal inspection when carrying out the servicing.
To assemble the unit, reverse the steps shown in the chart as below.



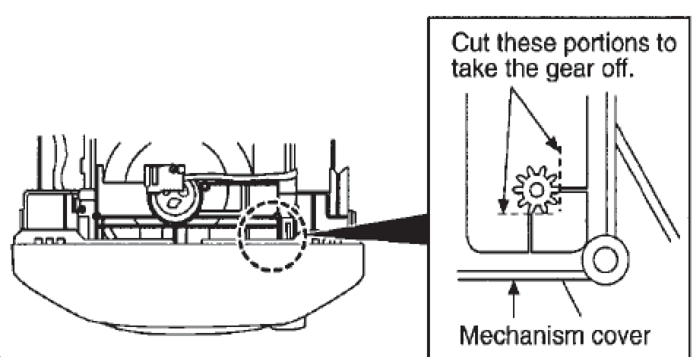
10.2 Gear for servicing (jig) Information

1.-This unit has a gear which is used for checking items (Open/Close of disc tray, up/down operation of traverse unit by manually) when servicing.

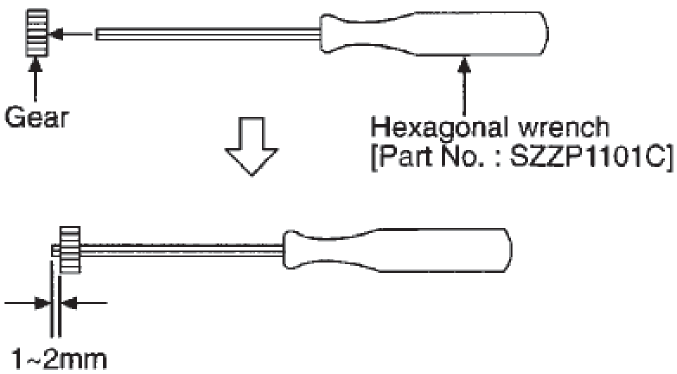
2.-For preparation of gear (for servicing), perform the procedures as follows.

3.-In case of re-servicing the same set, the "gear for servicing" may has been taken off because it has been used. The "gear for servicing" must be stored.

· Remove the gear provided with mechanism cover as shown below.



Insert the hexagonal screwdriver (2mm) into the gear, and then project the tip of screwdriver for 1~ 2 mm in length.

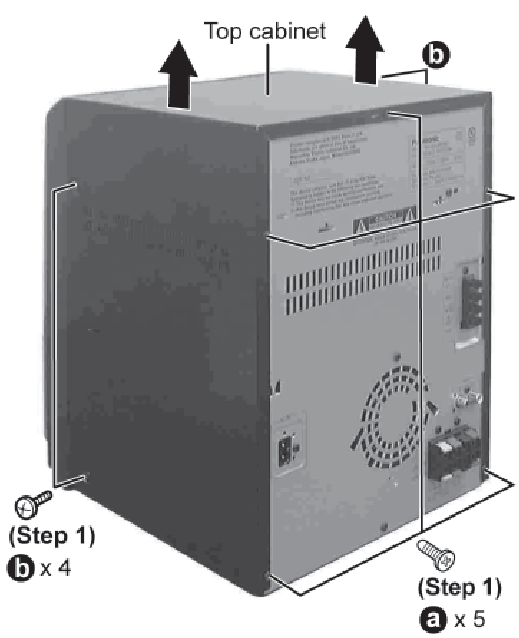


(Preparation of gear as jig is completed.)

10.3 Disassembly of Top Cabinet

Step 1 Remove 2 screws at each side and 5 screws at rear panel.

Step 2 Lift up both sides of the top cabinet, push the top cabinet towards the rear and remove the top cabinet.



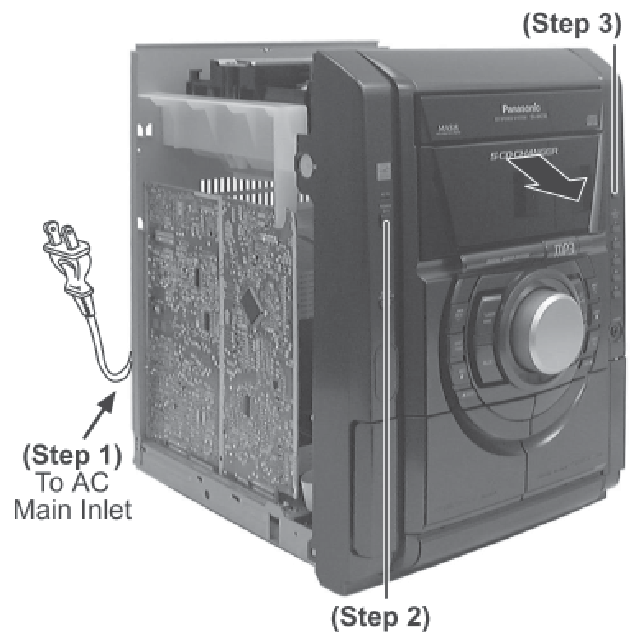
10.4 Disassembly of CD Lid

(The CD changer unit can be removed after the CD Lid is removed)

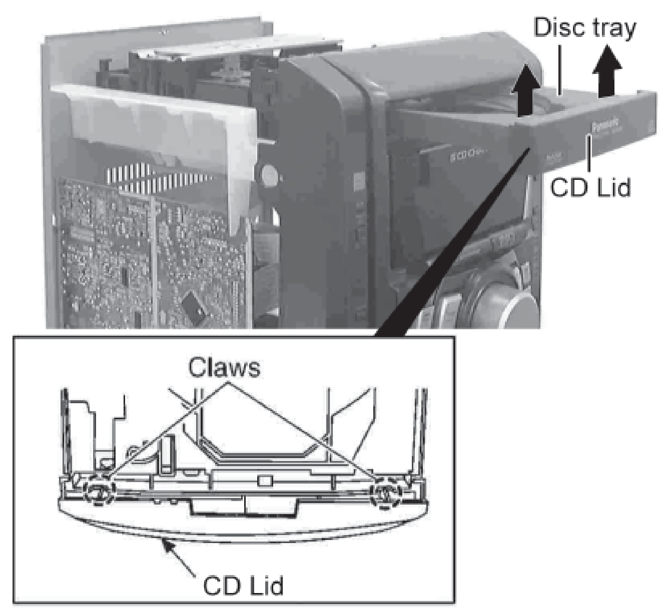
- Follow the (Step 1) - (Step 2) of Item 10.3 - Disassembly of Top Cabinet

- **Opening the disc tray automatically (Using Power Supply)**

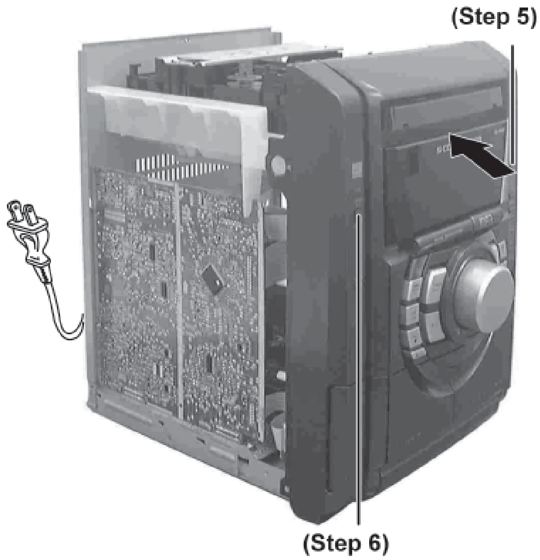
Step 1 Connect the AC power cord.
Step 2 Press the POWER button to power up the main unit.



Step 3 Press the OPEN/CLOSE button, the disc tray will open automatically.

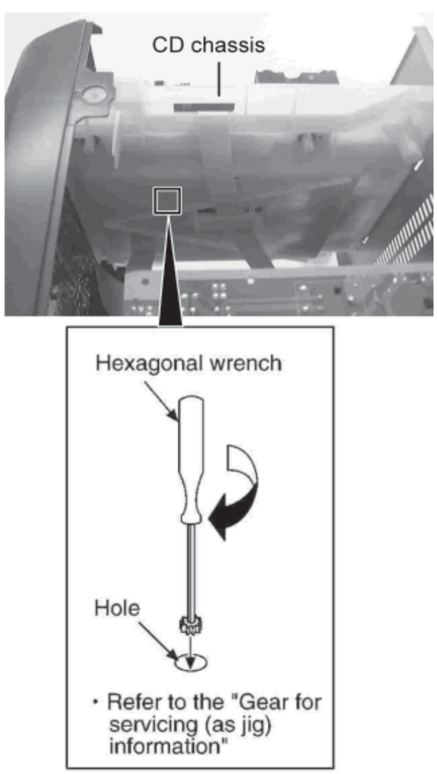


Step 4 Release the 2 claws, and then remove the CD Lid.
Step 5 Press the OPEN/CLOSE button, the disc tray will close.



Step 6 Press the POWER button to turn the power off.

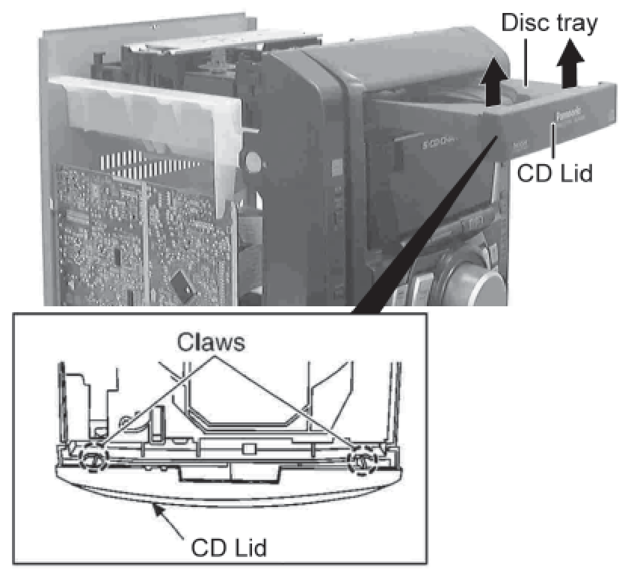
· **[Opening the disc tray manually (Using service tools)]**



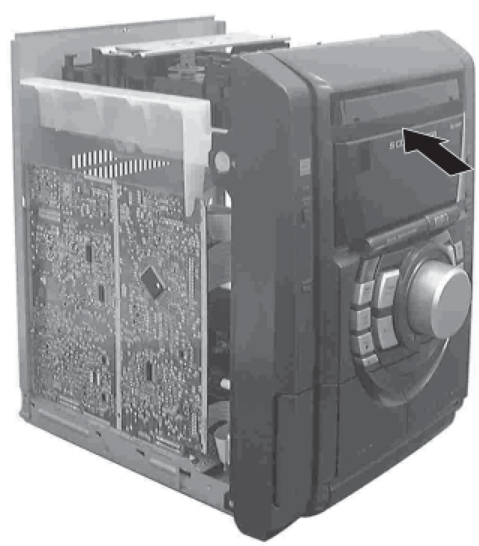
Step 1 Insert the gear tool into the hole on the underside of CD chassis and then rotate in the direction of arrow. The disc tray will be opened.



Step 2 Release the 2 claws, and then remove the CD lid cover.



Step 3 Repeat Step 2 but rotate the gear tools in anti-clockwise direction

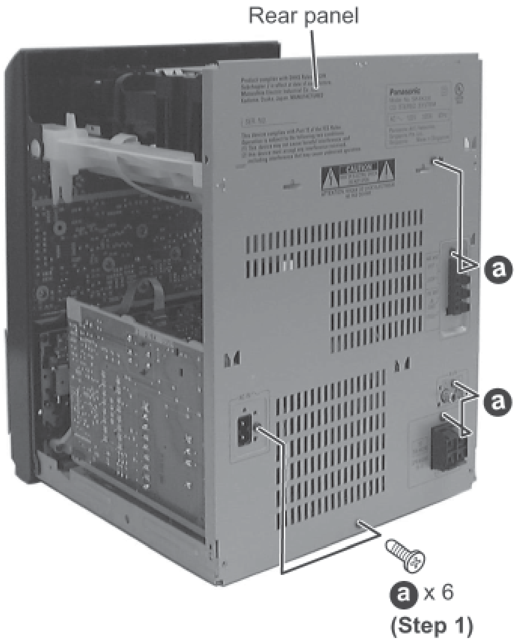


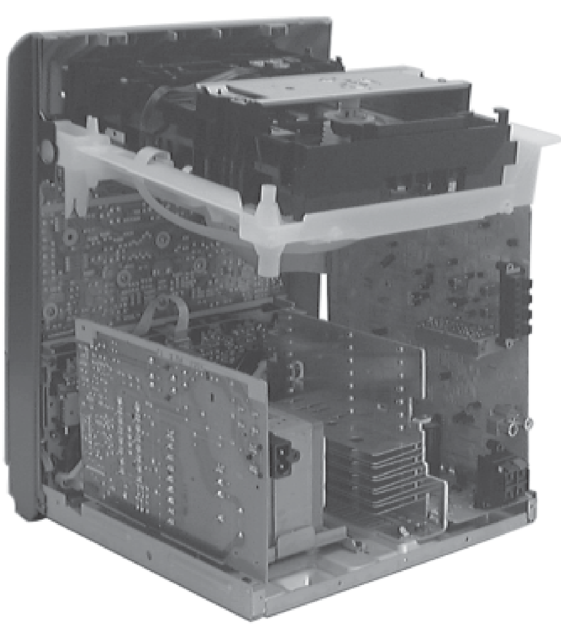
 Step 4 The disc tray will be closed.

10.5 Disassembly of Rear Panel

- Follow the (Step 1) - (Step 2) of Item 10.2 - Disassembly of Top Cabinet

Step 1 Remove 6screws and disconnect wire CN2810 (Fan) at rear cabinet as shown.

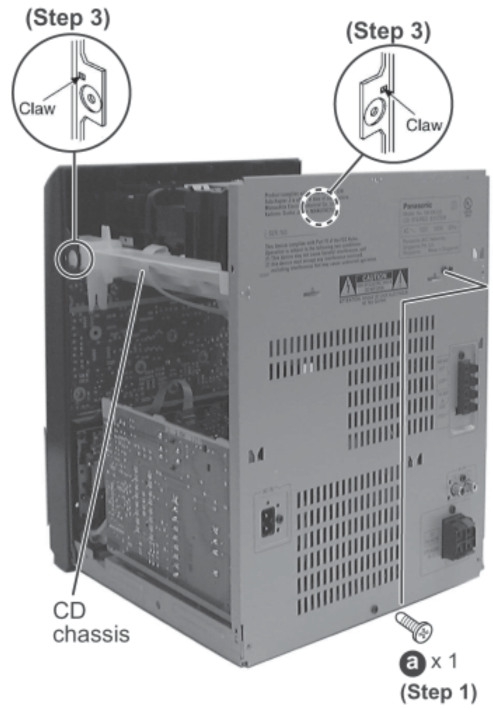




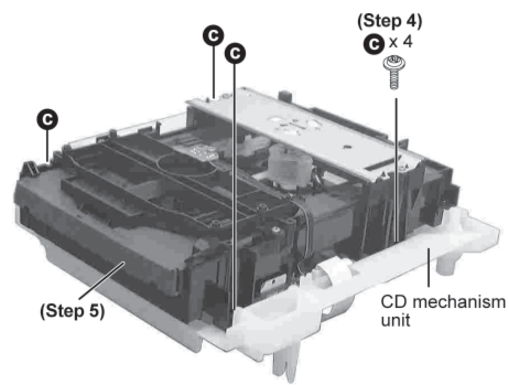
10.6 Disassembly of CD Mechanism Unit

- Follow the (Step 1) - (Step 2) of Item 10.3 - Disassembly of Top Cabinet

Step 1 Remove one screw at rear panel.
Step 2 Detach the FFC wires (CN2801 & CN2805).



Step 3 Release the claws of both ends, and then lift up the CD Mechanism Unit.

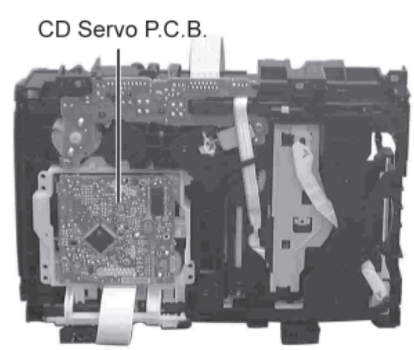


Step 4 Remove 4 screws.

Step 5 Remove the CD chassis.

Step 6 Lay the CD mechanism unit as shown.

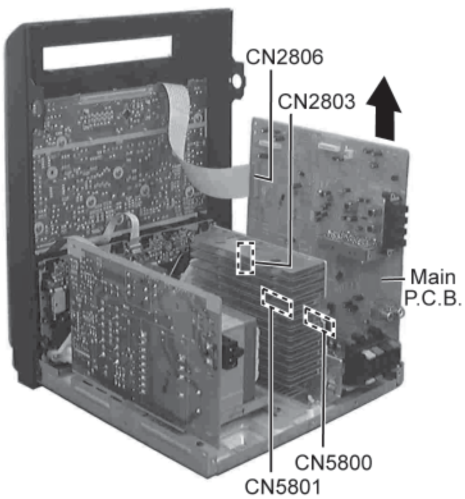
- For disassembly of CD mechanism unit, please refer to Section 10.11 of this manual.



10.7 Disassembly of Main P.C.B.

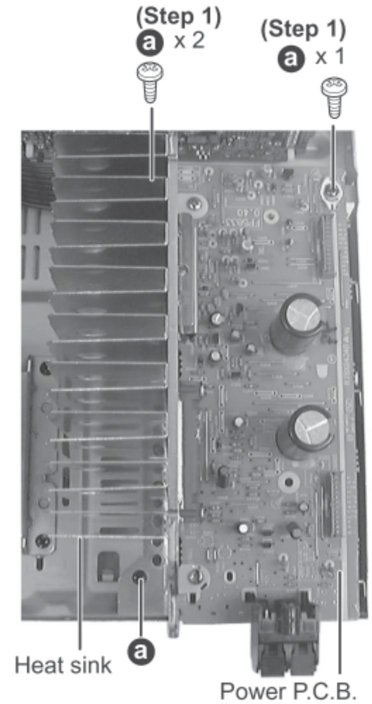
- Follow the (Step 1) - (Step 2) of Item 10.3 - Disassembly of Top Cabinet
- Follow the (Step 1) - (Step 6) of Item 10.4 - Disassembly of CD Lid
- Follow the (Step 1) of Item 10.5 - Disassembly of the Rear Panel
- Follow the (Step 1) - (Step 3) of Item 10.6 - Disassembly of the CD Mechanism Unit

Step 1 Disconnect FFC wires CN2803 & CN2806 from Main P.C.B.



Step 2 Lift up Main P.C.B. by disconnecting connectors CN5800 & CN5801 as arrow shown above.

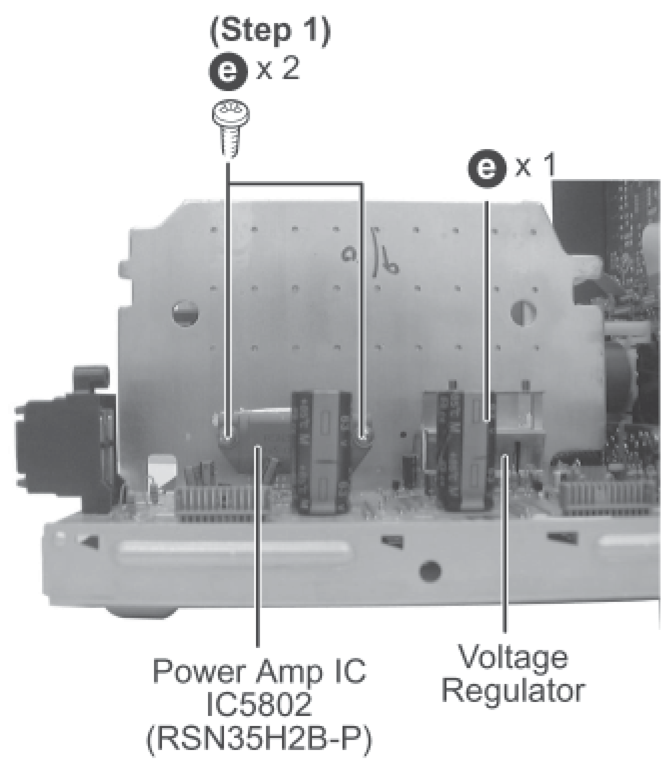
Step 1 Remove the 2 screws fixed at heat sink and 1 screw fixed at Power P.C.B..



Note:
Insulate the Power P.C.B. with insulation material to avoid short circuit.

- **Replacement of the Power Amplifier IC/ Voltage Regulator**

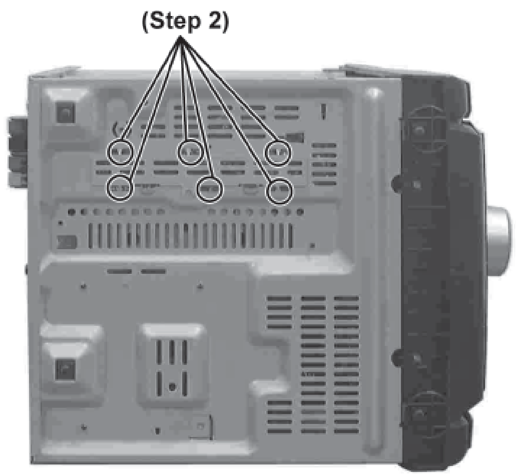
Step 1 Remove 2 screws fixed to the Power Amplifier IC and 1 screw to Voltage Regulator.



10.8 Disassembly of Power P.C.B.

- Follow the (Step 1) - (Step 2) of Item 10.3 - Disassembly of Top Cabinet
- Follow the (Step 1) - (Step 6) of Item 10.4 - Disassembly of CD Lid
- Follow the (Step 1) of Item 10.5 - Disassembly of the Rear Panel
- Follow the (Step 1) - (Step 3) of Item 10.6 - Disassembly of the CD Mechanism Unit
- Follow the (Step 1) - (Step 2) of Item 10.7 - Disassembly of the Main P.C.B.

Step 2 Break the joint with a metal cutter as shown below.



Step 3 Unsolder the terminals of Power Amp IC, transistor and replace the components.



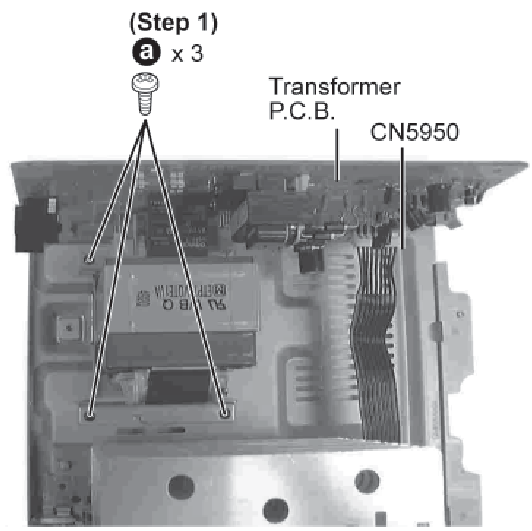
Step 4 Fix back the cut portion with a screw as shown.



10.9 Disassembly of Transformer P.C.B.

- Follow the (Step 1) - (Step 2) of Item 10.3 - Disassembly of Top Cabinet
- Follow the (Step 1) - (Step 6) of Item 10.4 - Disassembly of CD Lid
- Follow the (Step 1) of Item 10.5 - Disassembly of the Rear Panel
- Follow the (Step 1) - (Step 3) of Item 10.6 - Disassembly of the CD Mechanism Unit

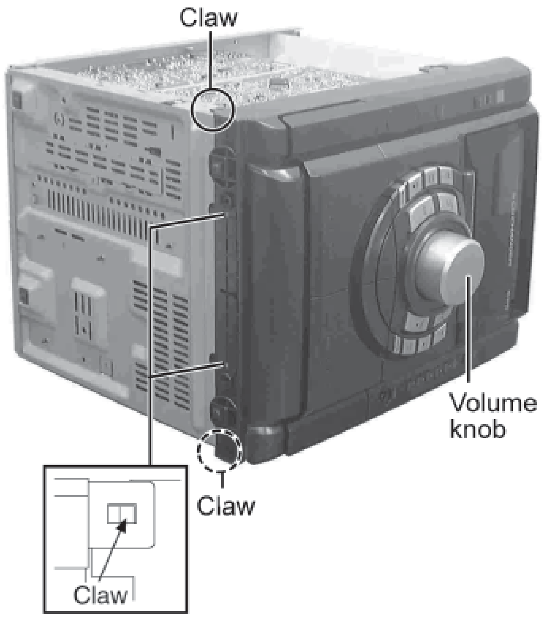
Step 1 Remove 3 screws, disconnect connector CN5950.



10.10 Disassembly of Front Panel Unit

- Follow the (Step 1) - (Step 2) of Item 10.3 - Disassembly of Top Cabinet
- Follow the (Step 1) - (Step 6) of Item 10.4 - Disassembly of CD Lid
- Follow the (Step 1) of Item 10.5 - Disassembly of the Rear Panel
- Follow the (Step 1) - (Step 3) of Item 10.6 - Disassembly of the CD Mechanism Unit

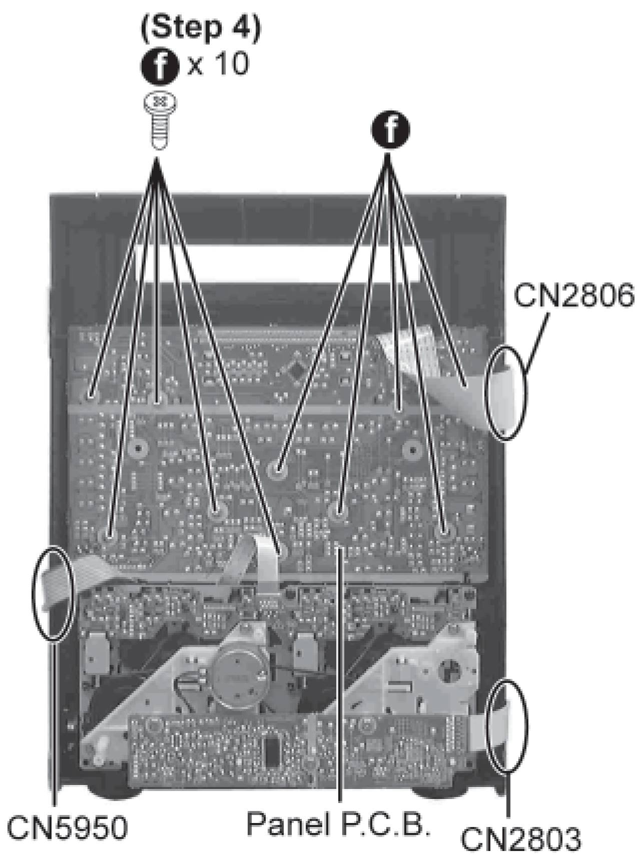
Step 1 Lay the unit as shown below.



Step 2 Release 2 claws at bottom and 2 claws each side, draw the front panel ass'y forward.

Step 3 Remove volume knob.

- **Disassembly of Panel P.C.B.**



Step 4 Remove the 10 screws.
Step 5 Disconnect connectors CN2806, CN2803 and CN5950.

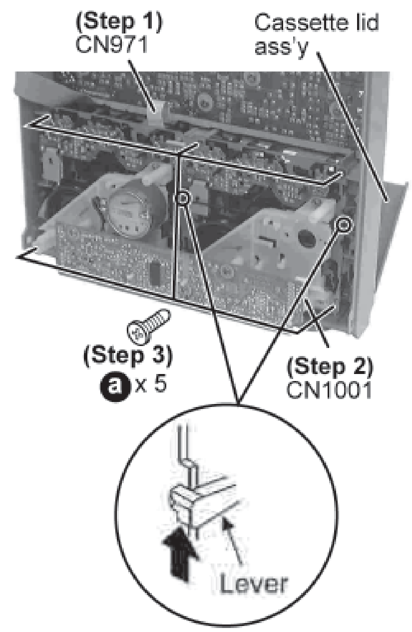
10.11 Disassembly of Deck Mechanism Unit

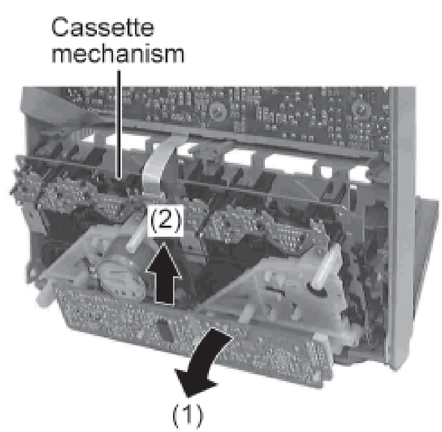
- Follow the (Step 1) - (Step 2) of Item 10.3 - Disassembly of Top Cabinet
- Follow the (Step 1) - (Step 6) of Item 10.4 - Disassembly of CD Lid
- Follow the (Step 1) of Item 10.5 - Disassembly of the Rear Panel
- Follow the (Step 1) - (Step 3) of Item 10.6 - Disassembly of the CD Mechanism Unit
- Follow the (Step 1) - (Step 3) of Item 10.10 - Disassembly of the Front Panel Unit

Step 1 Detach FFC wire (at CN971).

Step 2 Disconnect FFC flat cable from the connector (CN1001).

Step 3 Remove the 5 screws.



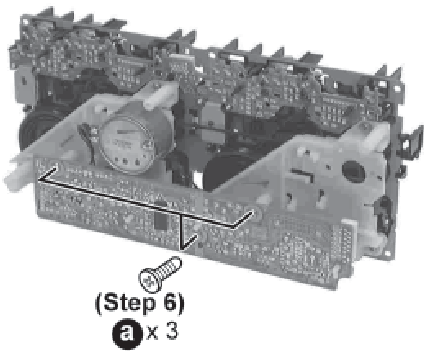


Step 4 Push the lever upward, and then open the cassette lid ass'y (For DECK1 and DECK2).

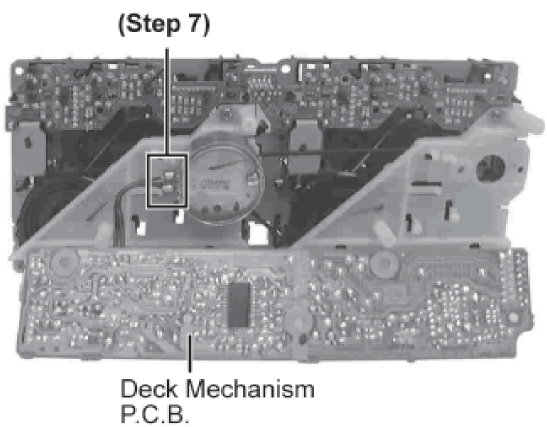
Step 5 Tilt the cassette mechanism unit in the direction of arrow (1), and then remove it in the direction of arrow (2).

- For replacement of Deck Mechanism P.C.B.

Step 6 Remove 3 screws.



Step 7 Unsolder the motor terminals.

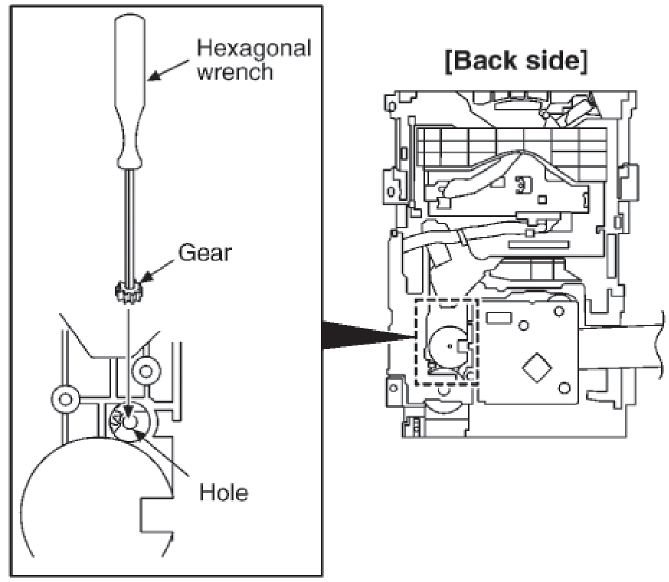


Step 8 Remove Deck Mechanism P.C.B.

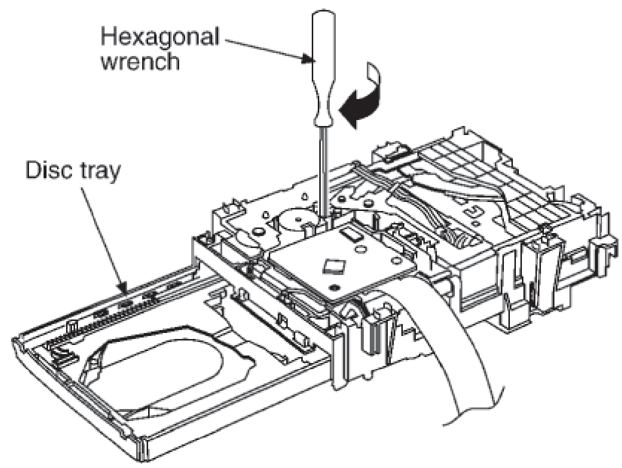
10.12 CD Mechanism Main Component Replacement Procedures

- Follow the (Step 1) - (Step 2) of Item 10.3 - Disassembly of Top Cabinet
- Follow the (Step 1) - (Step 6) of Item 10.4 - Disassembly of CD Lid
- Follow the (Step 1) - (Step 6) of Item 10.6 - Disassembly of the CD Mechanism Unit

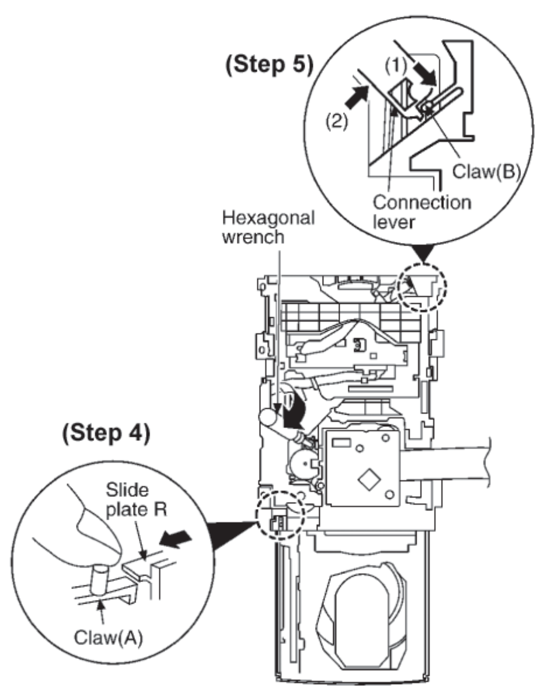
10.12.1 Replacement of the Traverse Deck



Step 2 Insert the gear with hexagonal wrench into the hole.

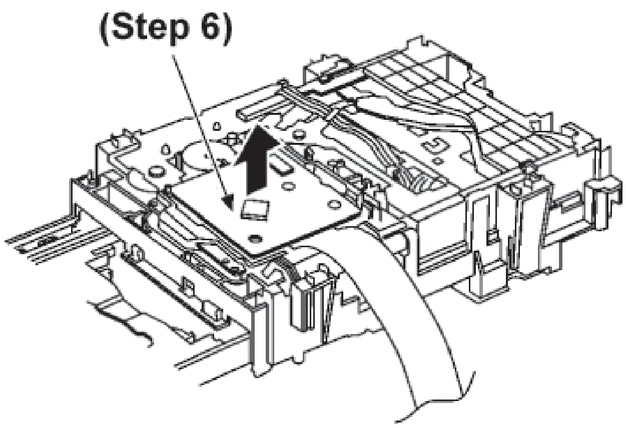


Step 3 Rotate the hexagonal wrench in the direction of arrow (clockwise), and then open the disc tray fully.

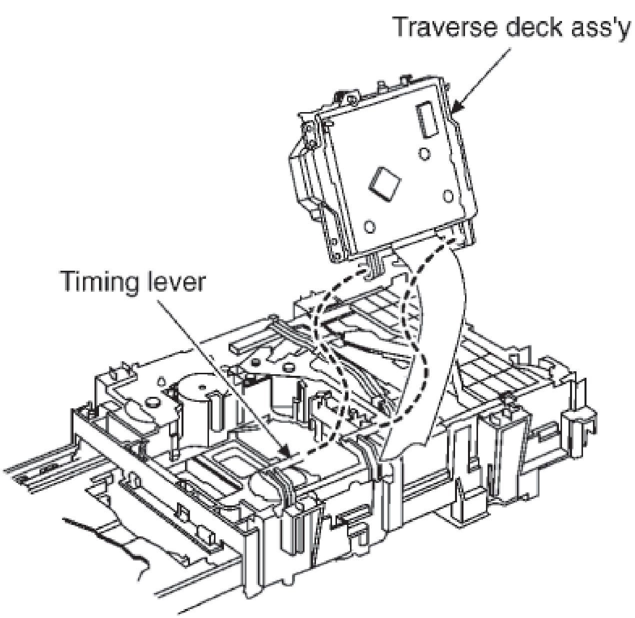


Step 4 With pressing the claw (A), rotate the hexagonal wrench clockwise. (The slide plate R moves for a little amount.)

Step 5 Pressing the claw (B) in the direction of arrow (1), the connection lever moves in the direction of arrow (2).

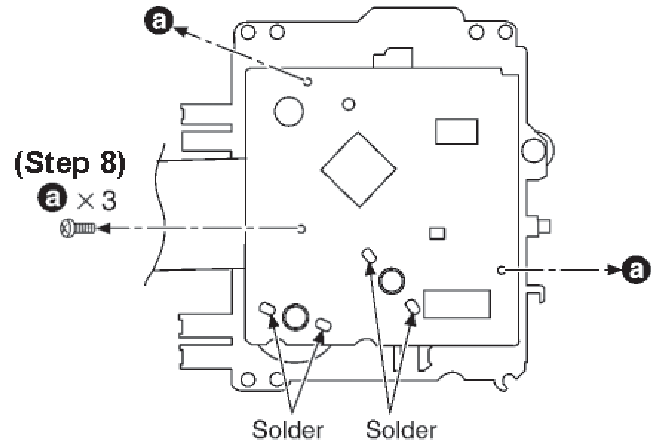


Step 6 Lift up the traverse deck ass'y.



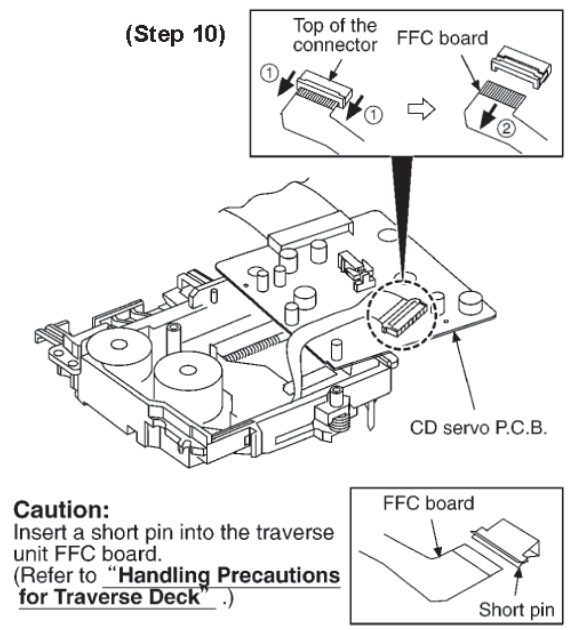
Step 7 Remove the traverse deck ass'y from the timing lever.

Caution:
When removing or inserting the traverse deck avoid touching the OPU lens and pressing onto the turntable.

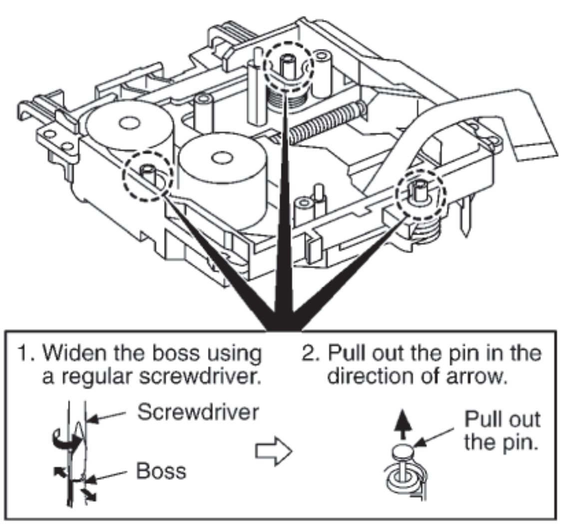


Step 8 Remove 3 screws.

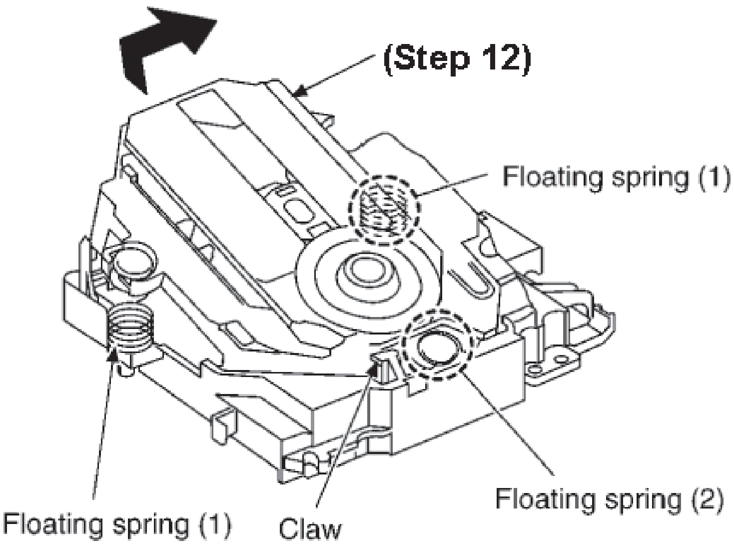
Step 9 Unsolder the motor terminals (4 points).



Step 10 Remove the FFC board from the connector, and then remove the CD Servo P.C.B.



Step 11 Remove the pin.



Step 12 Release the claw, and then remove the traverse deck ass'y.

Note:
Be careful not to lose the 3 floating spring because those will also be removed on removal of the traverse deck ass'y.

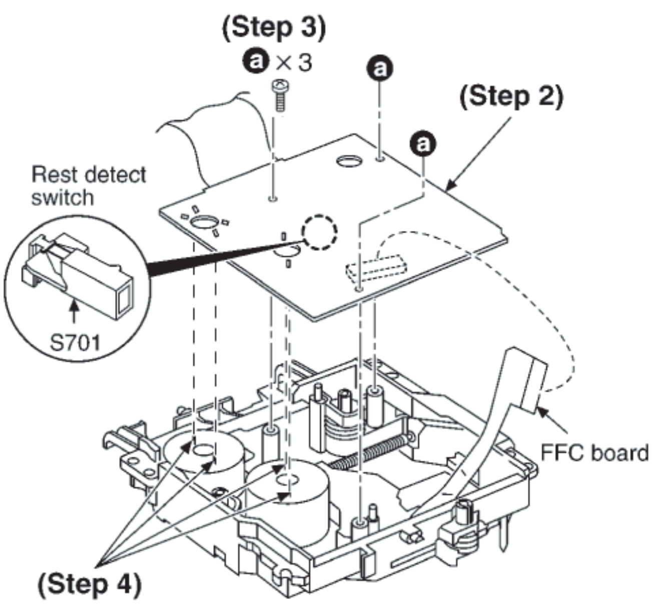
- **Installation of the CD Servo P.C.B. after replacement**

Step 1 Connect the FFC board.

Step 2 Install the CD servo P.C.B. in the traverse deck ass'y.

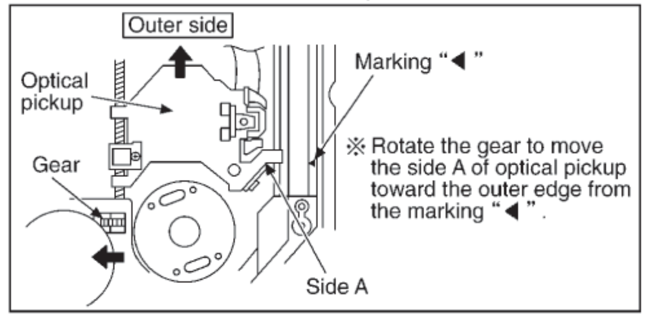
Step 3 Remove 3 screws.

Step 4 Solder.

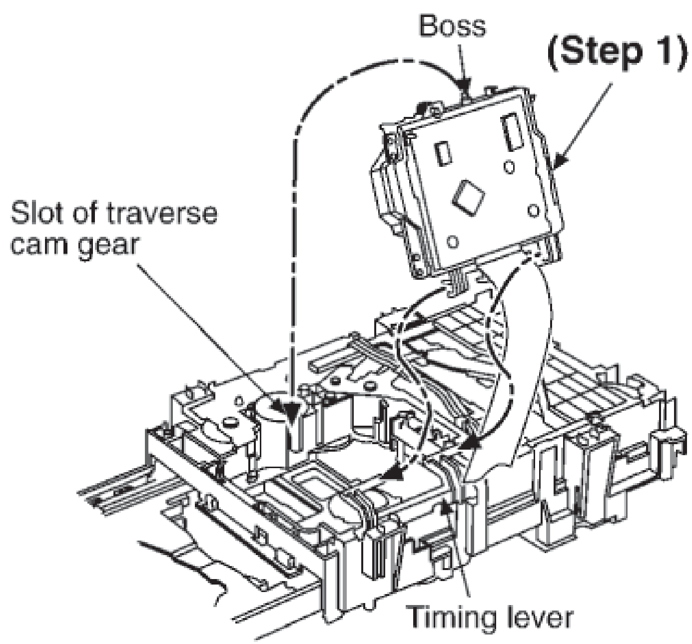


Note for installation of the CD servo P.C.B.

Before installing the CD servo P.C.B., move the optical pickup toward the outer edge from the mark "◀".
[Otherwise, the rest detect switch (S701) mounted on the CD servo P.C.B. may be damaged.]

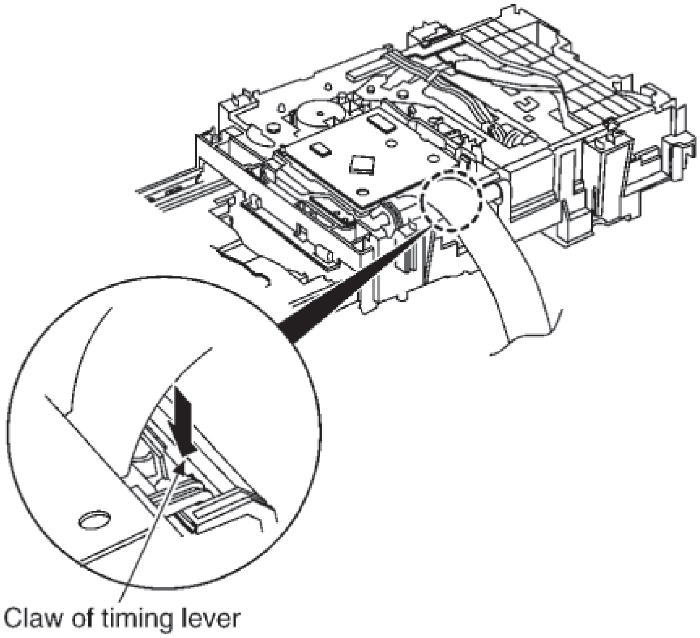


Installation for traverse deck ass'y

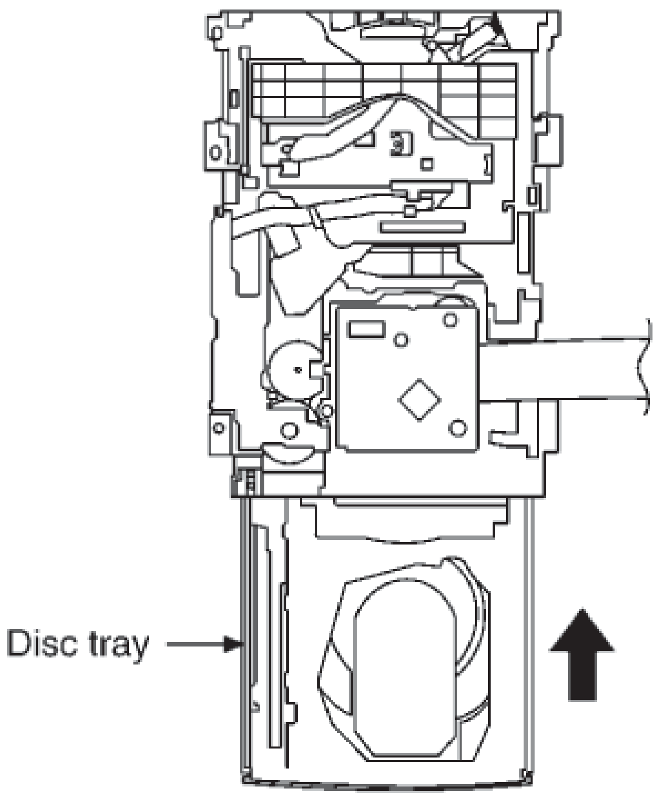


Step 1 Install the traverse deck ass'y to the timing lever.

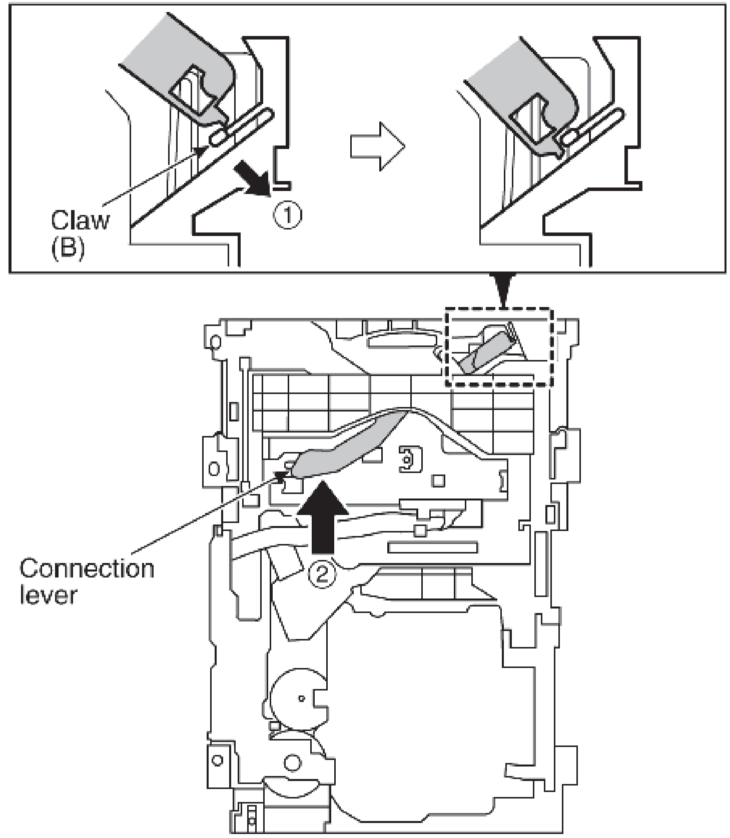
Step 2 Align the boss of traverse deck ass'y with the slot of traverse cam gear.



Step 3 Force the claw of timing lever.



Step 4 Force the disc tray fully.



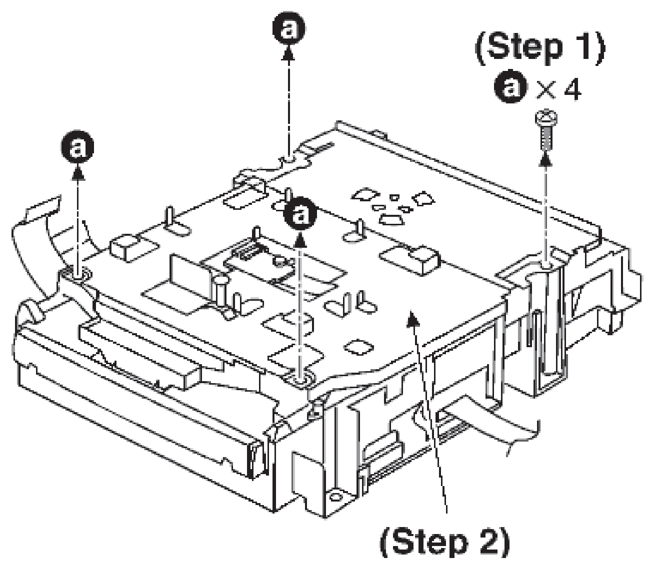
Step 5 With pressing the claw (B) in the direction of arrow (1), force the connection lever in the direction of arrow (2).

10.12.2 Replacement for the Disc Tray

Step 1 Remove 4 screws.

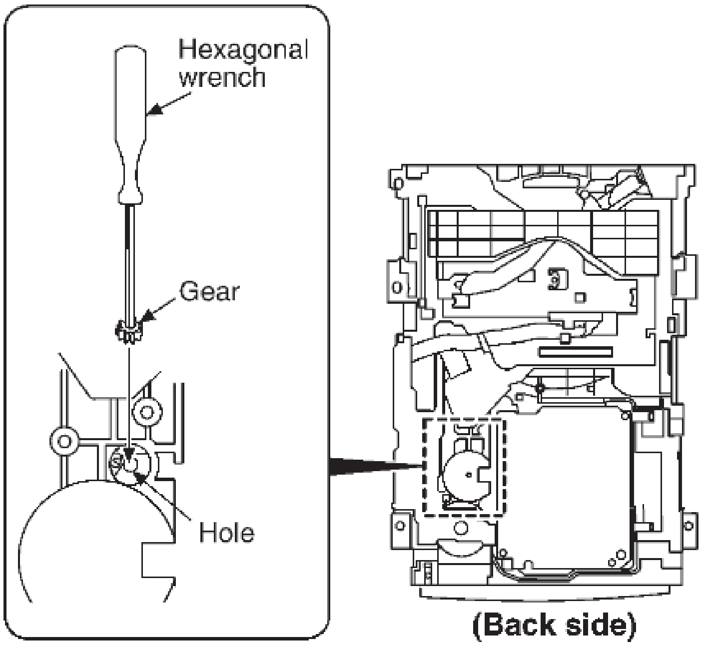
Step 2 Remove the upper plate.

Step 3 Remove 3 screws.

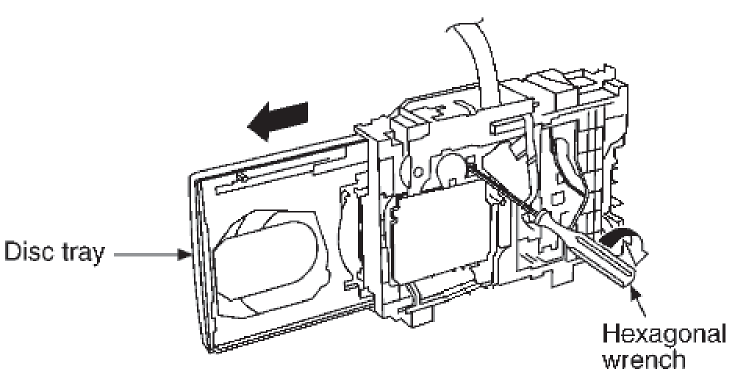


Step 4 With lifting the claw in the direction of (1), draw the CD Detect P.C.B. in the direction of arrow (2).

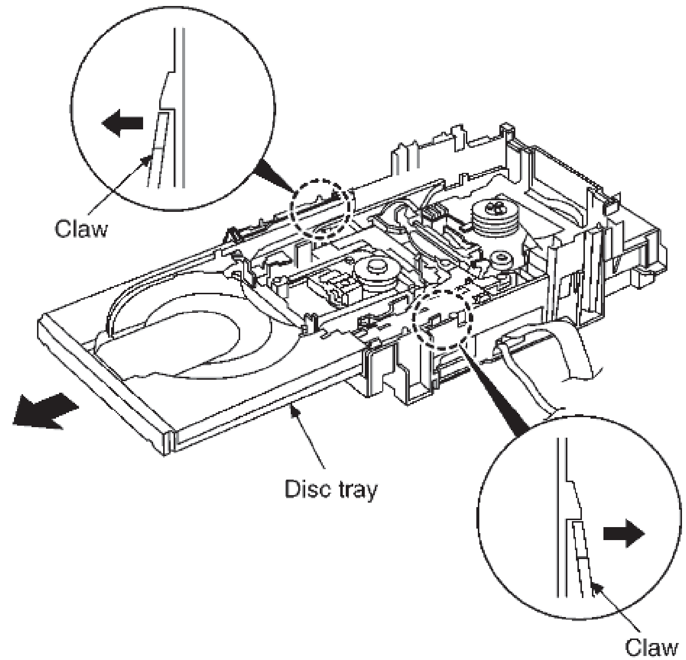
Step 5 Remove the mechanism cover.



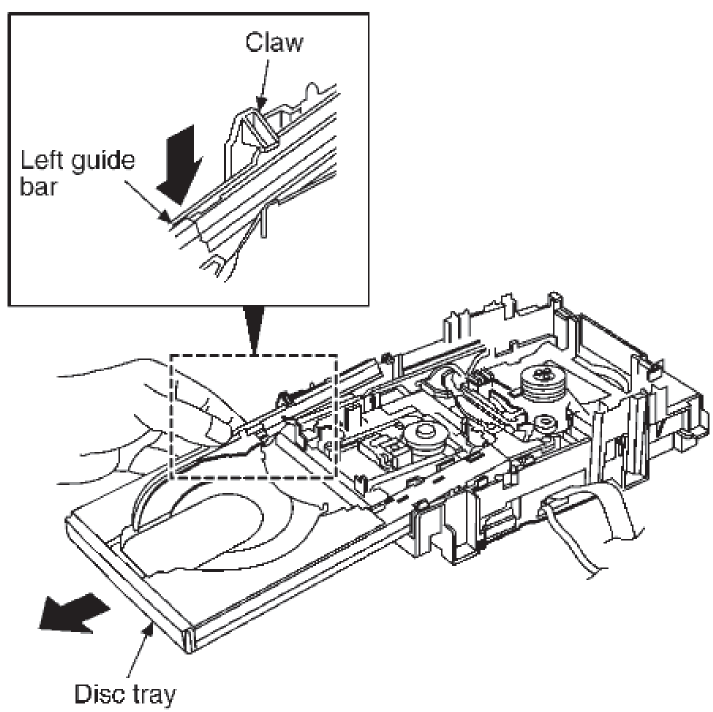
Step 6 Insert the gear with hexagonal wrench into the hole.



Step 7 Rotate the hexagonal wrench in the direction of arrow, and then open the disc tray fully.

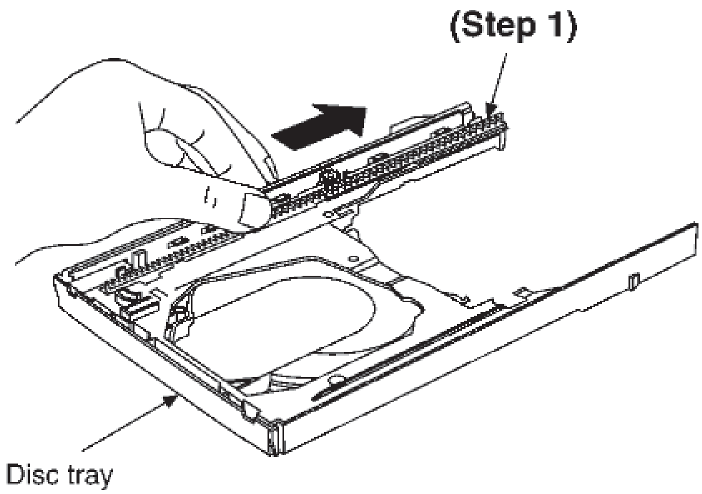


Step 8 Release the both claws, and then draw the disc tray.

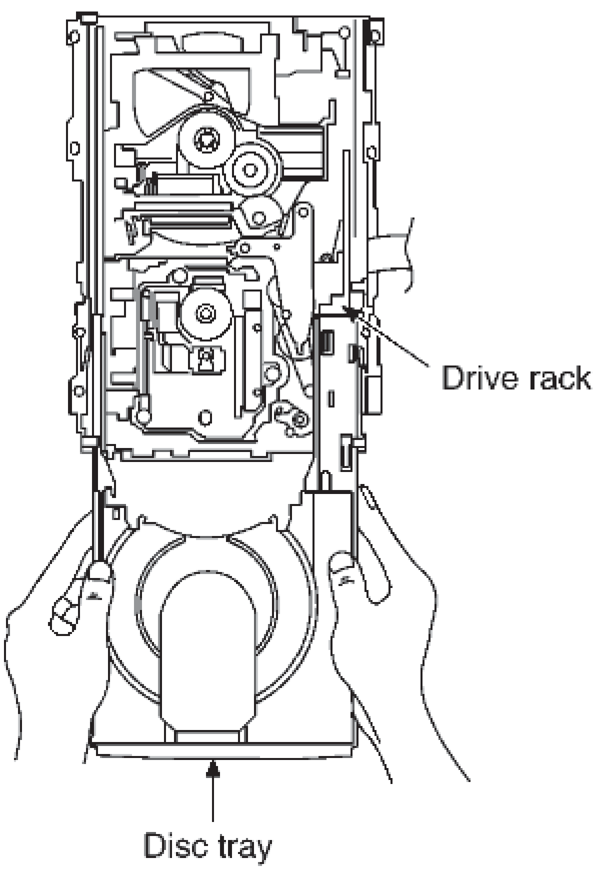


Step 9 With forcing the left guide bar manually because the left guide bar interfers with claw, draw the disc tray.

[Installation of the disc tray after replacement]

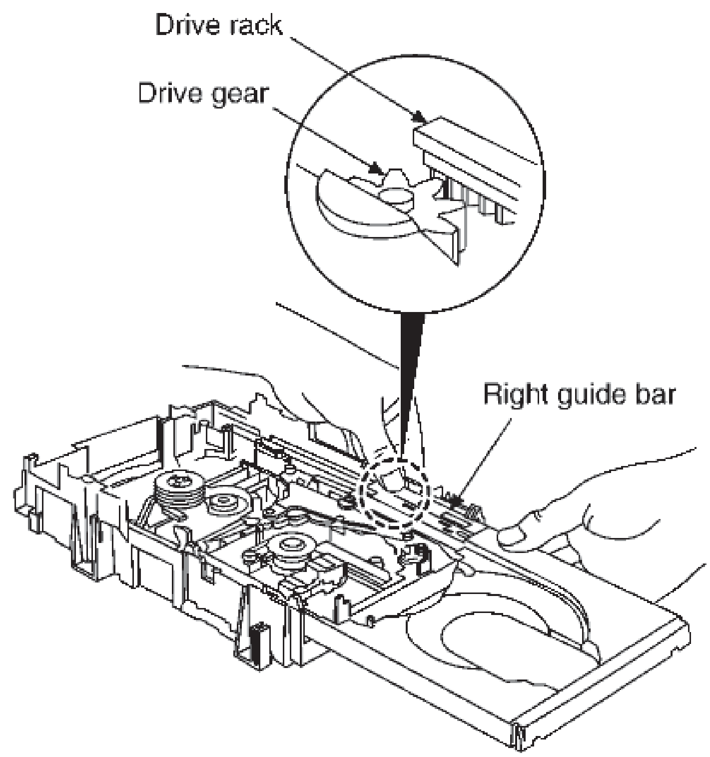


Step 1 Slide the drive rack fully in the direction of arrow.

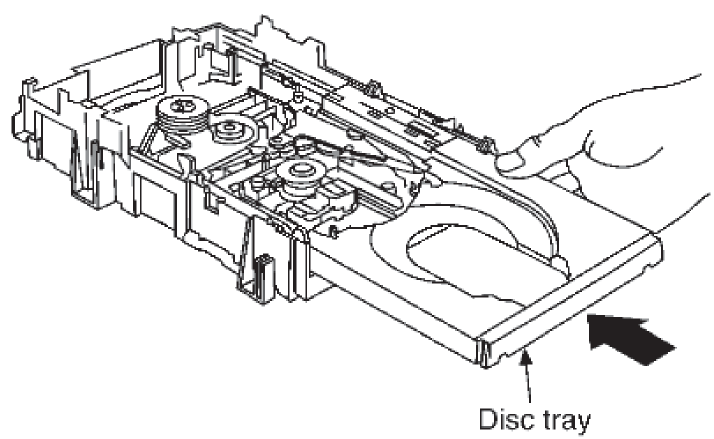


Step 2 Holding the drive rack not to move, install the disc tray.

Step 3 Align the drive rack with the drive gear.



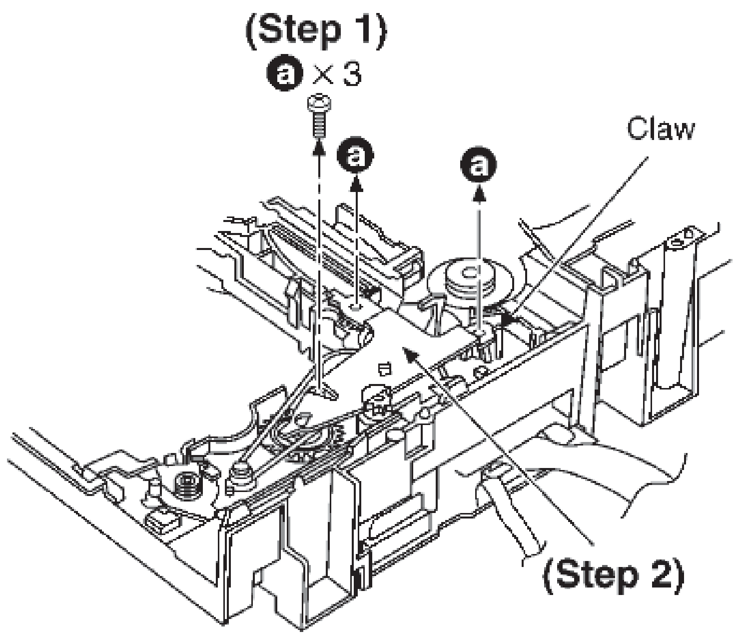
NOTE:
Force the right guide bar of tray base manually not to move upwards.



Step 4 Holding the disc tray manually, push the disc tray in the direction of the arrow.

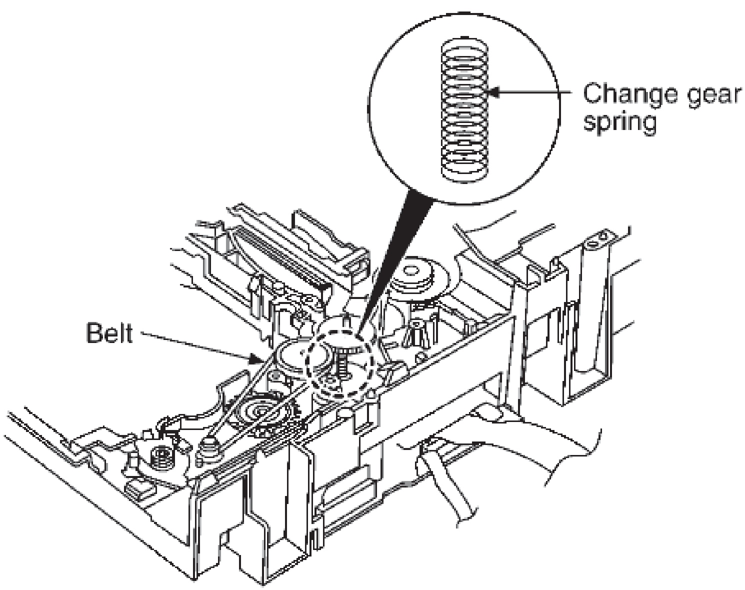
10.12.3 Disassembly and reassembly for mechanism base drive unit

Step 1 Remove 3 screws.



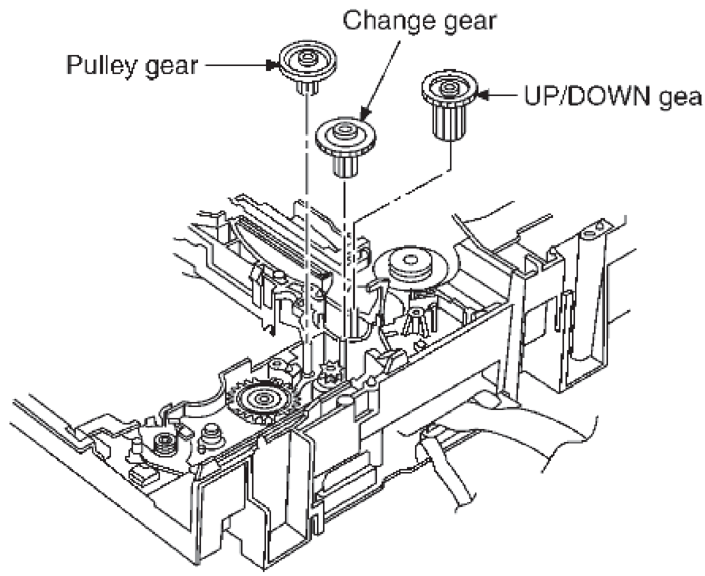
Step 2 Release the claw, and then remove the gear holder.

Step 3 Remove the belt and change gear spring.

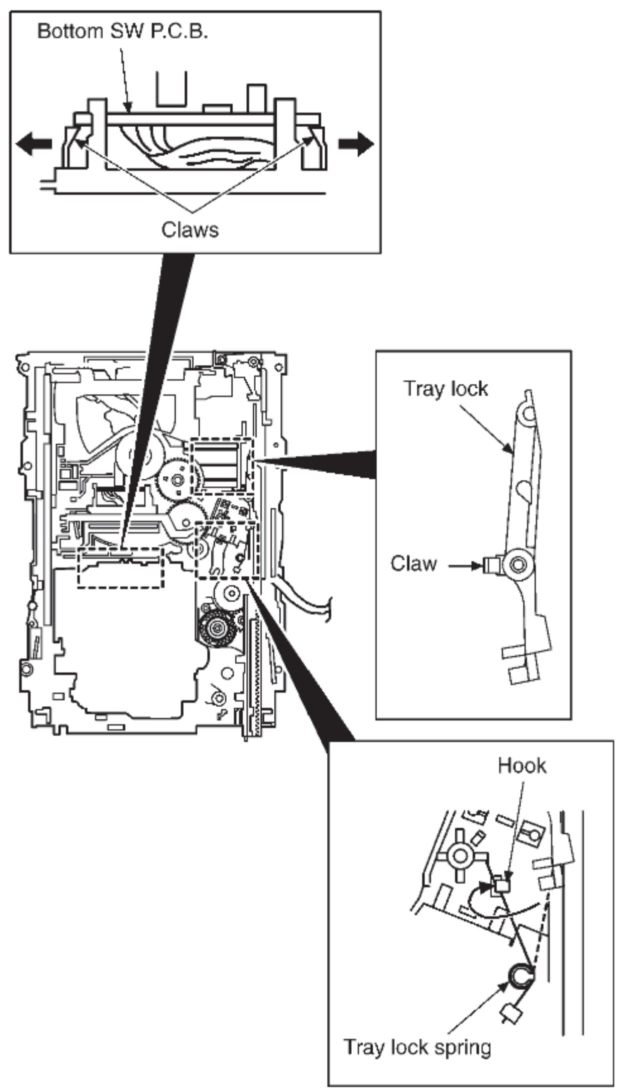


NOTE:
Take care not to lose the change gear spring.

Step 4 Remove the pulley gear, change gear and UP/DOWN gear.



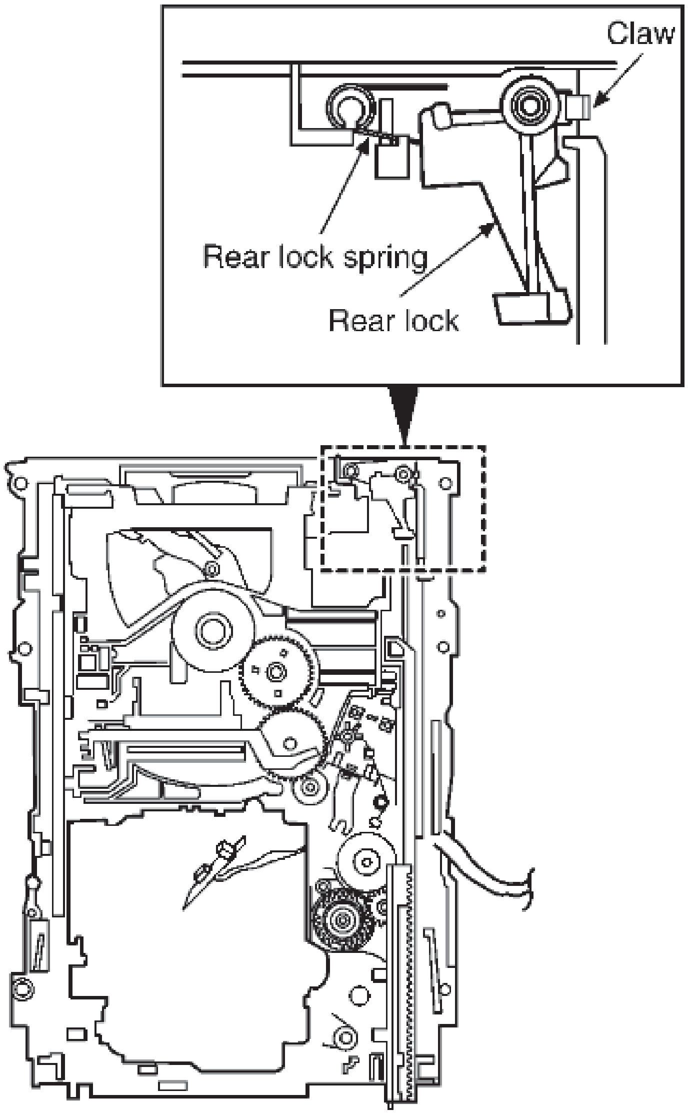
Step 5 Release the 2 claws, and then remove the bottom SW P.C.B..



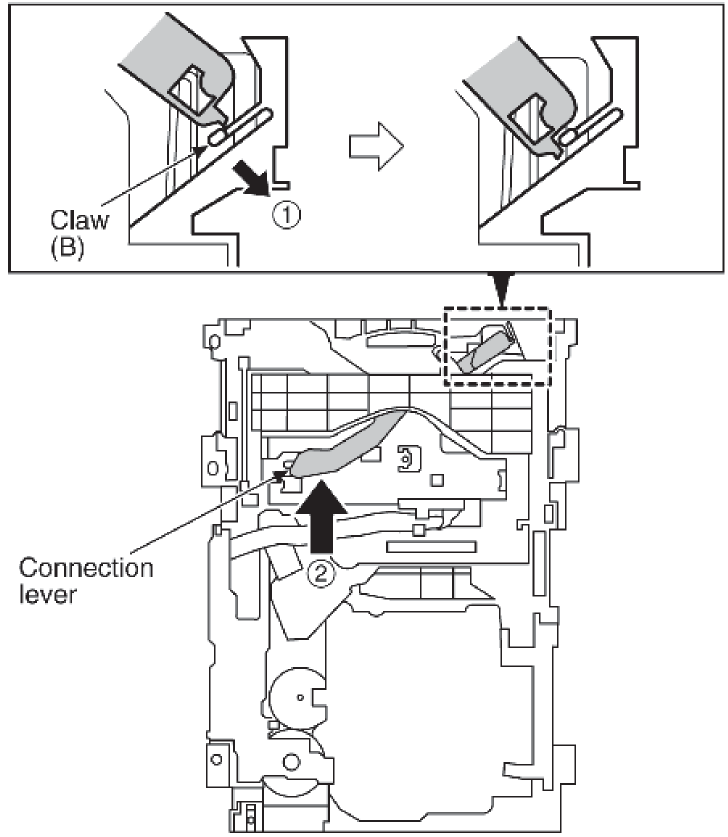
Step 6 Install the tray lock spring to hook temporary.

Step 7 Release the claw, and then remove the tray lock.

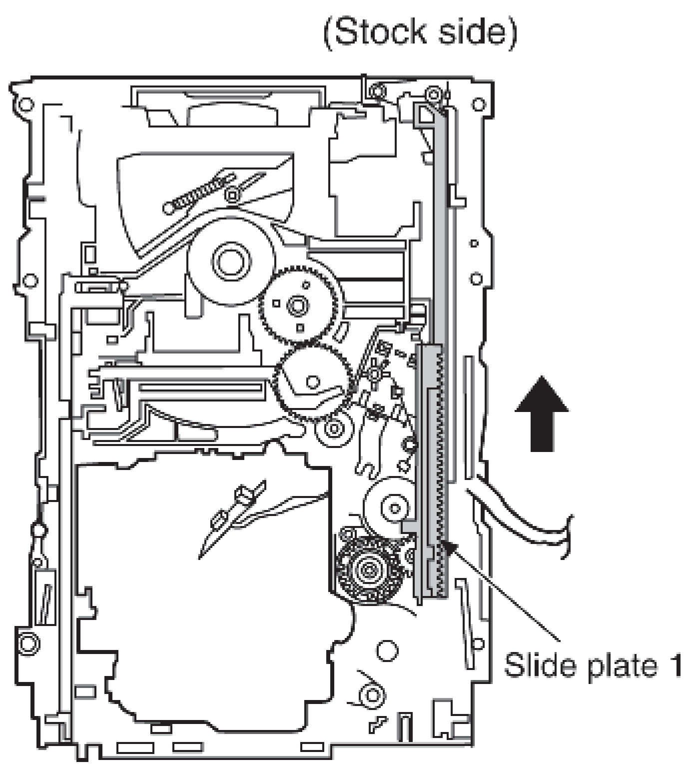
Step 8 Release the claw, and then remove the rear lock.



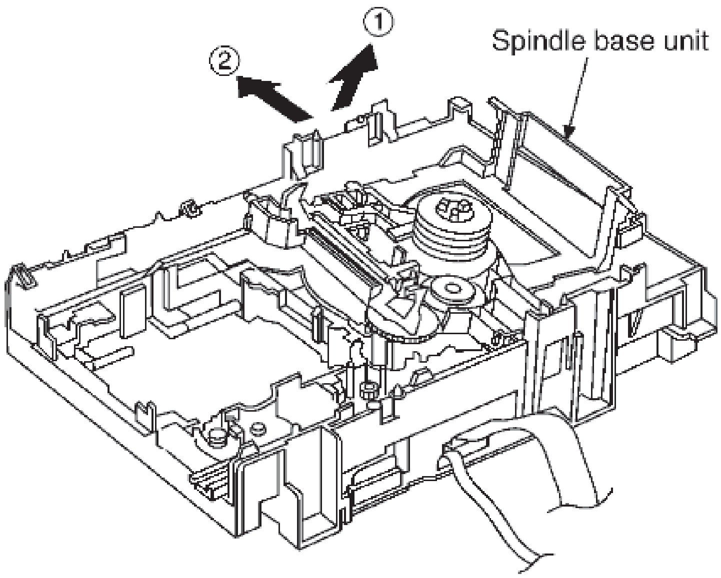
Step 9 Pressing the claw (B) in the direction of arrow (1), force the connection lever in the direction of arrow (2).

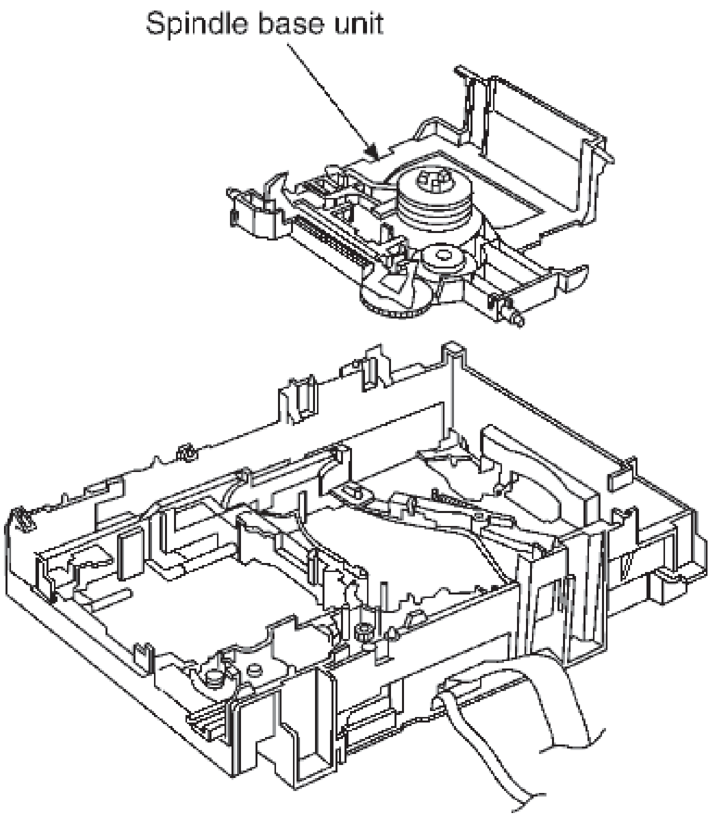


Step 10 Move the slide plate 1 to the end of stock side.

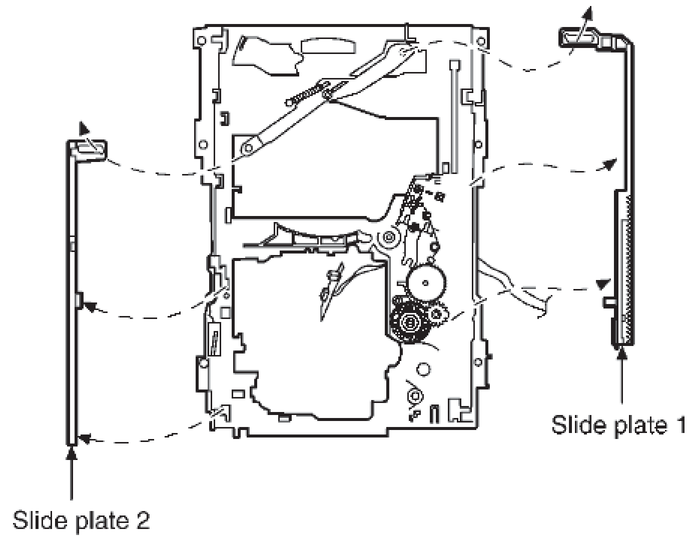


Step 11 Lift up the left end of spindle base unit in the direction of arrow (1), and then remove the unit in the direction of arrow (2).

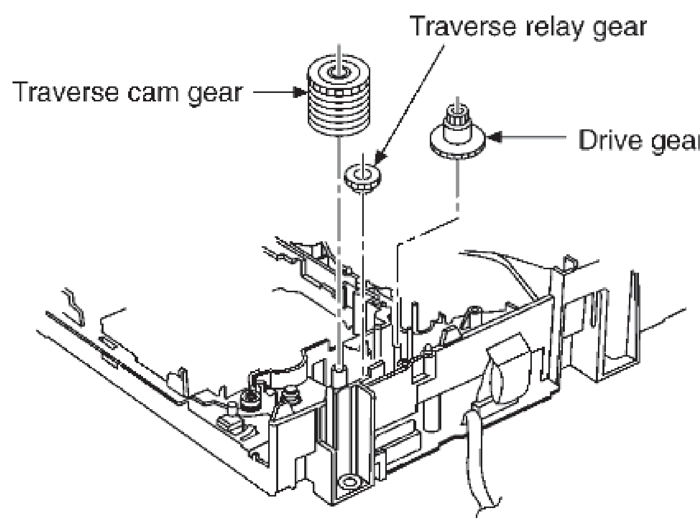




Step 12 Remove slide plate 1 and slide plate 2.

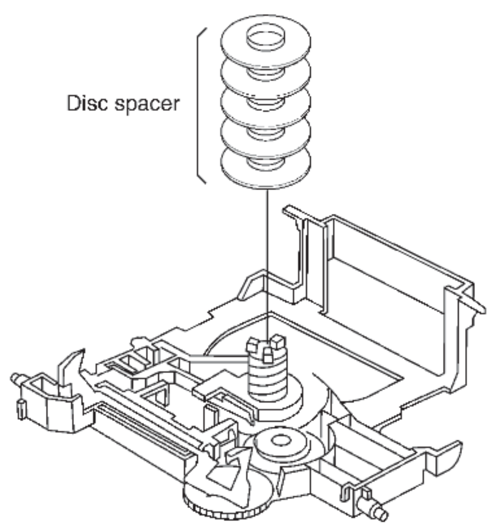


Step 13 Remove the traverse relay gear, traverse cam gear and drive gear.

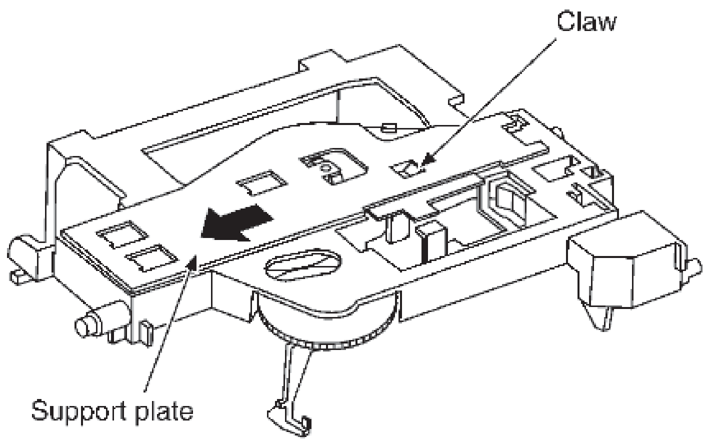


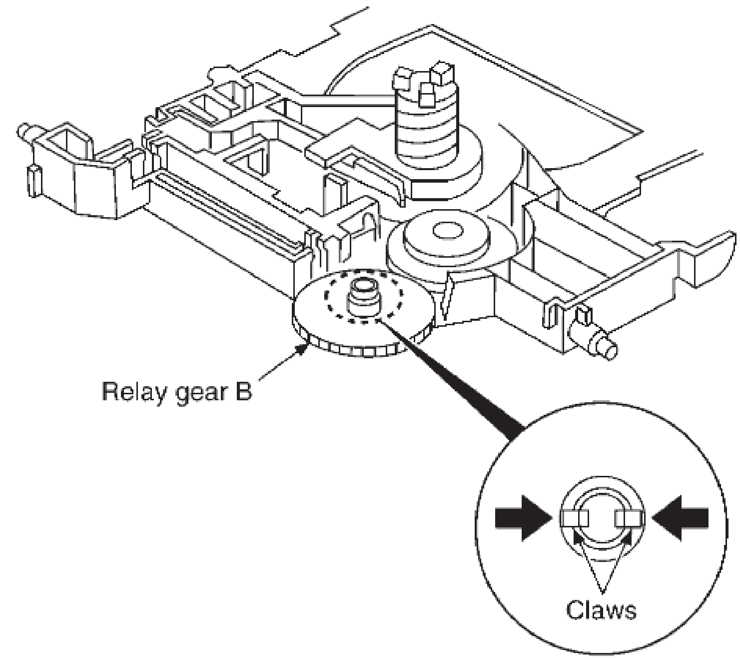
[Dissassembly/reassembly for the spindle base unit]

Step 1 Draw the 5 disc spacers.

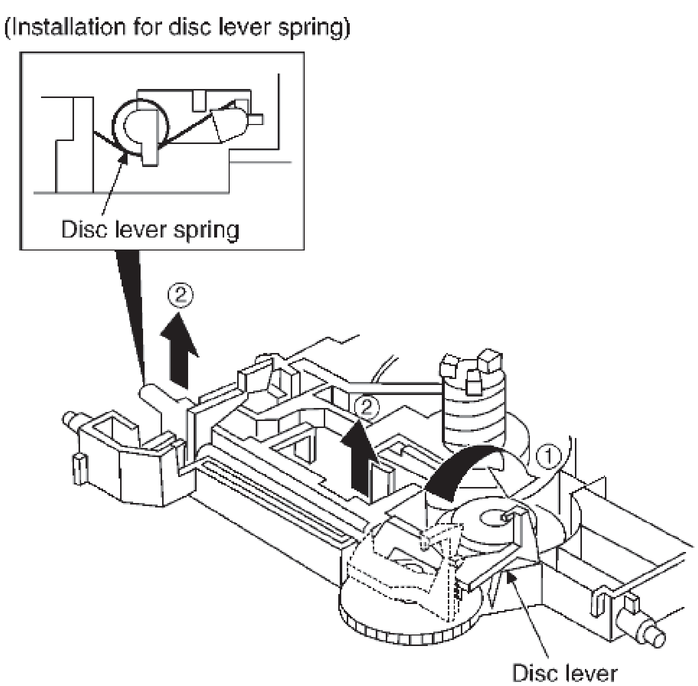


Step 2 Pushing the claw, slide the support plate in the direction of arrow, and then remove it.





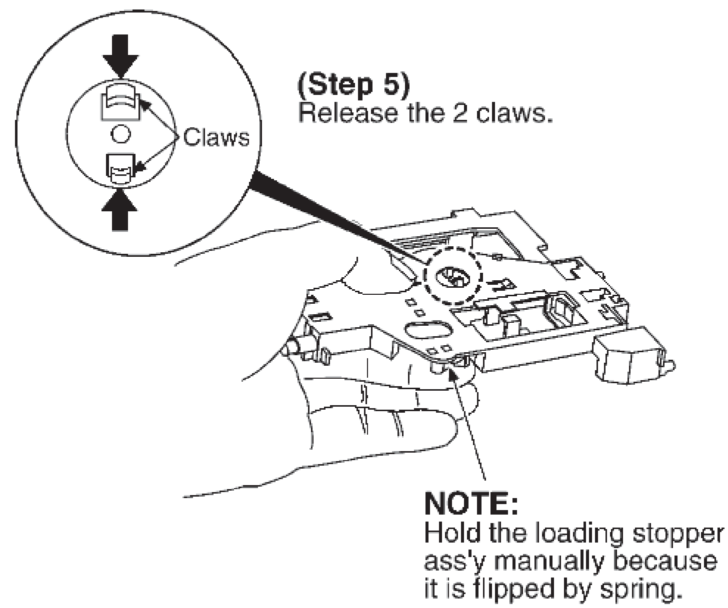
Step 3 Rotate the disc lever in the direction of arrow (1), draw the disc lever.



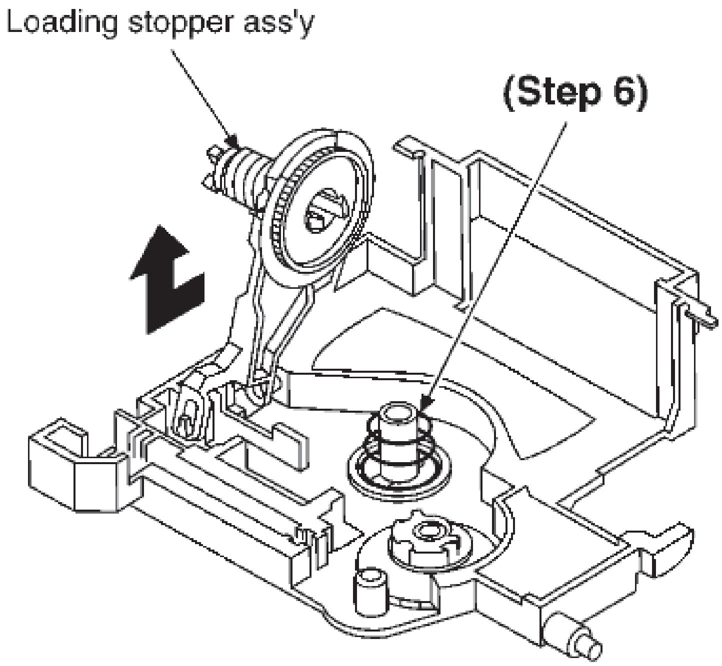
NOTE:
Take care not to lose the disc lever spring.

Step 4 Release the 2 claws, and then draw the relay gear B.

Step 5 Release the 2 claws as shown below.



NOTE:
Hold the loading stopper ass'y manually bacause it is flipped by spring.

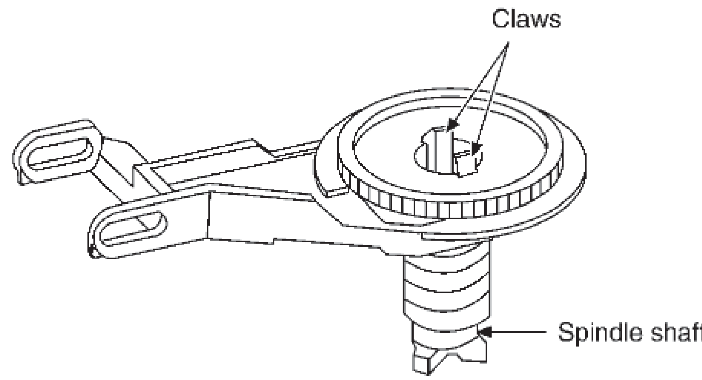


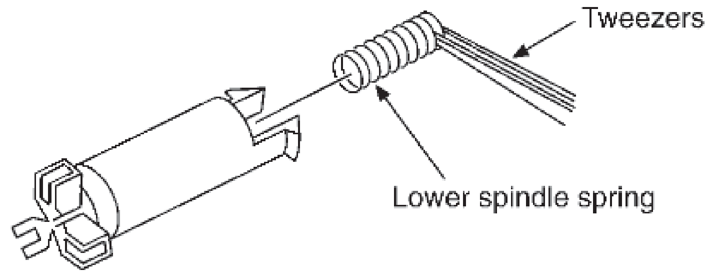
Step 6 Remove the cushion spring.

Step 7 Remove the loading stopper ass'y in the direction of arrow.

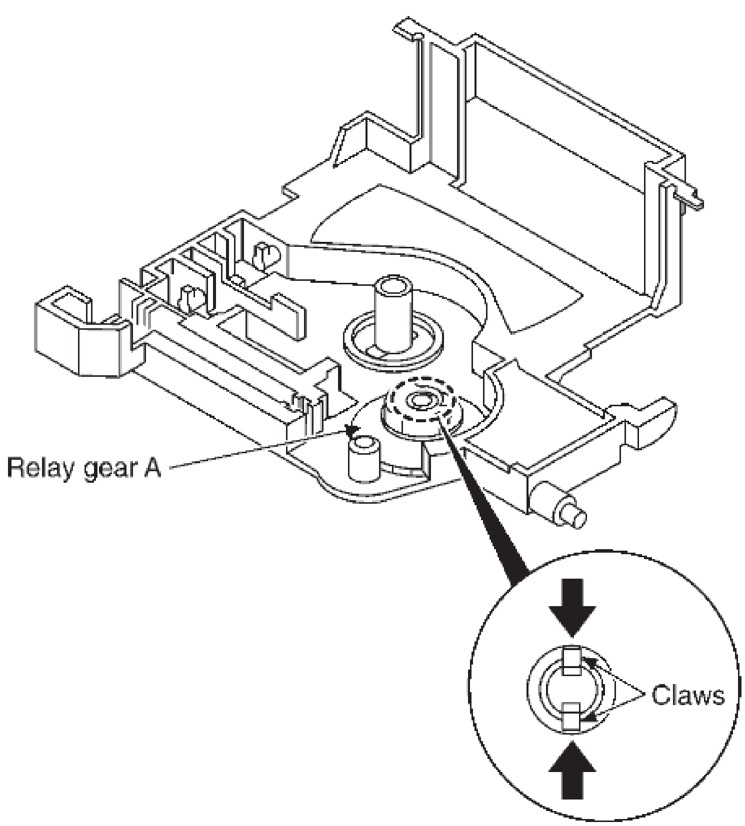
Step 8 Release the 2 claws, and then remove the relay gear A.

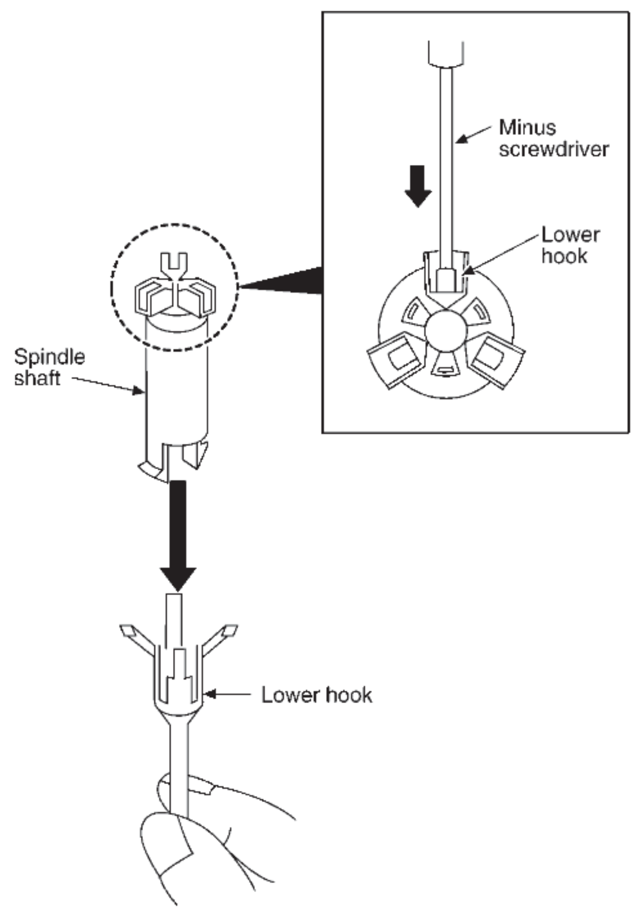
Step 9 Release the 2 claws, and then remove the spindle shaft.



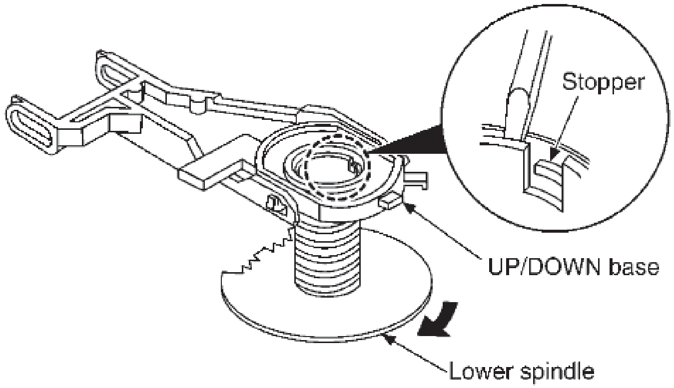


Step 10 Remove the lower spindle spring with tweezers.
Step 11 Force the lower hook with thin tip of minus screwdriver.



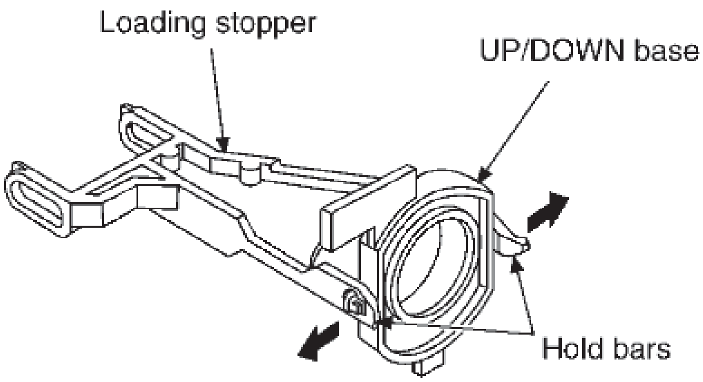


Step 12 Squeeze the shaft of lower hook, and then draw it.



Step 13 Rotate the lower spindle in the direction of arrow until the lower spindle interferes with stopper.

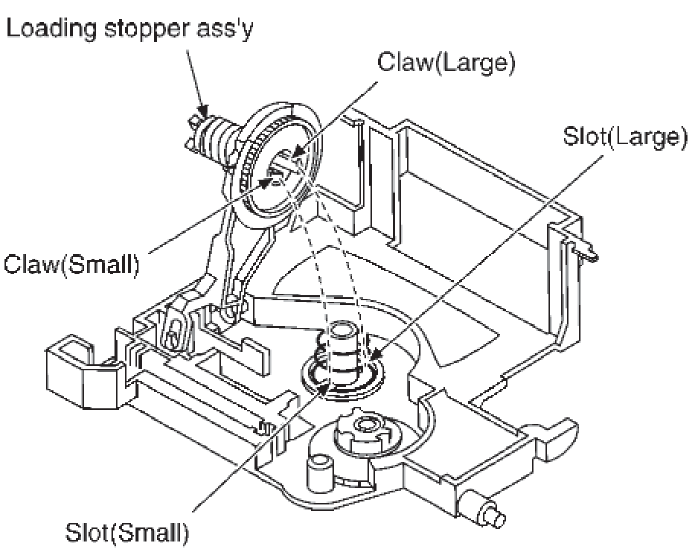
Step 14 Insert the thin tip of minus screwdriver between the lower spindle and UP/DOWN base, and then slacken the lower spindle to release the stopper. Then, rotate the lower spindle and remove it.



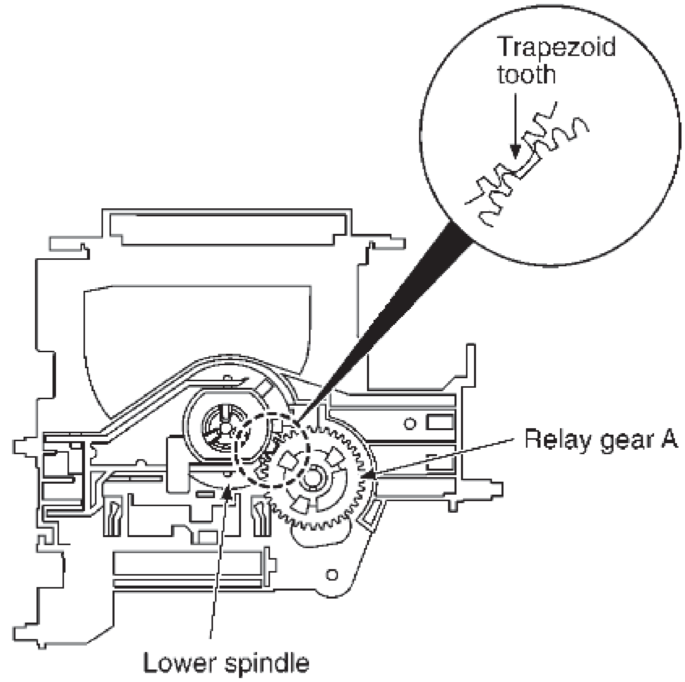
Step 15 Rotate the UP/DOWN base at a 90° angle. Then, spread the hold bars of loading stopper and remove the UP/ DOWN base.

[Installation for loading stopper ass'y]

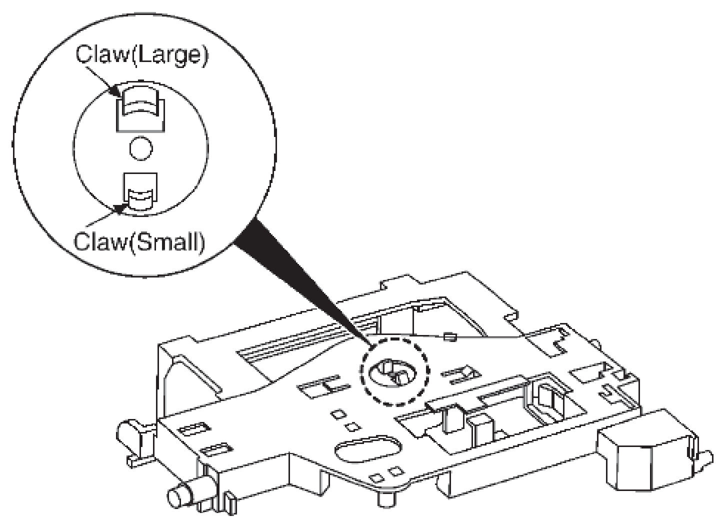
Step 1 Align the claw of loading stoppers ass'y with the slot of spindle base. (Caution should be exercised when alignment of claw due to the size of claws.)



Step 2 Lower the loading stopper ass'y, and then align the lower spindle with the trapezoid tooth of relay gear A.

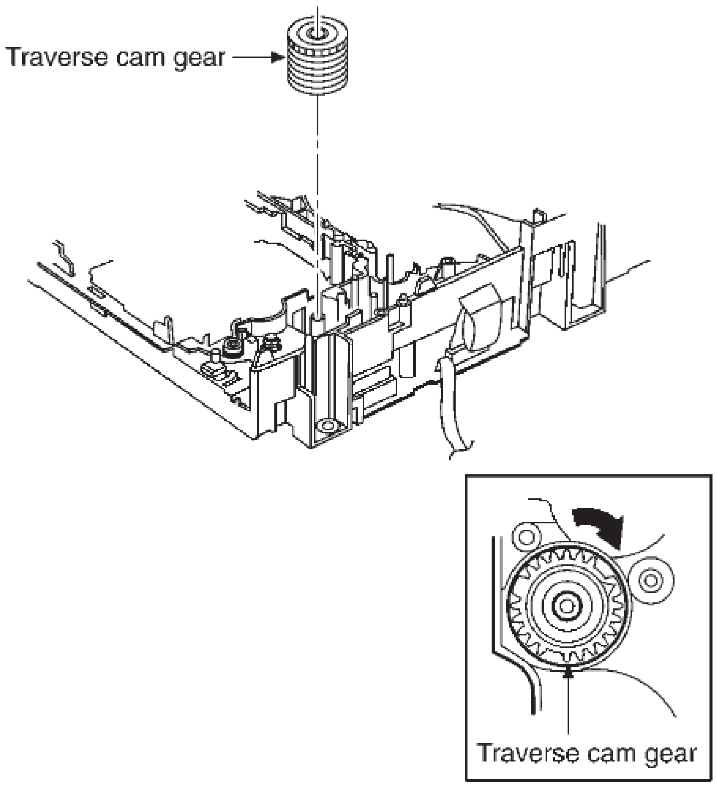


Step 3 Force the loading stopper ass'y, latch the claw firmly.

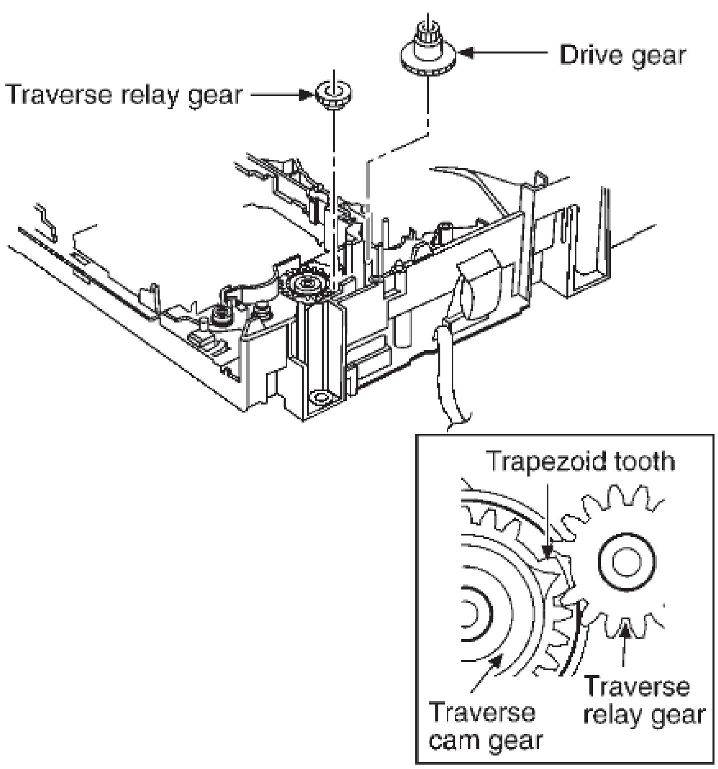


[Reassembly for mechanism base drive unit]

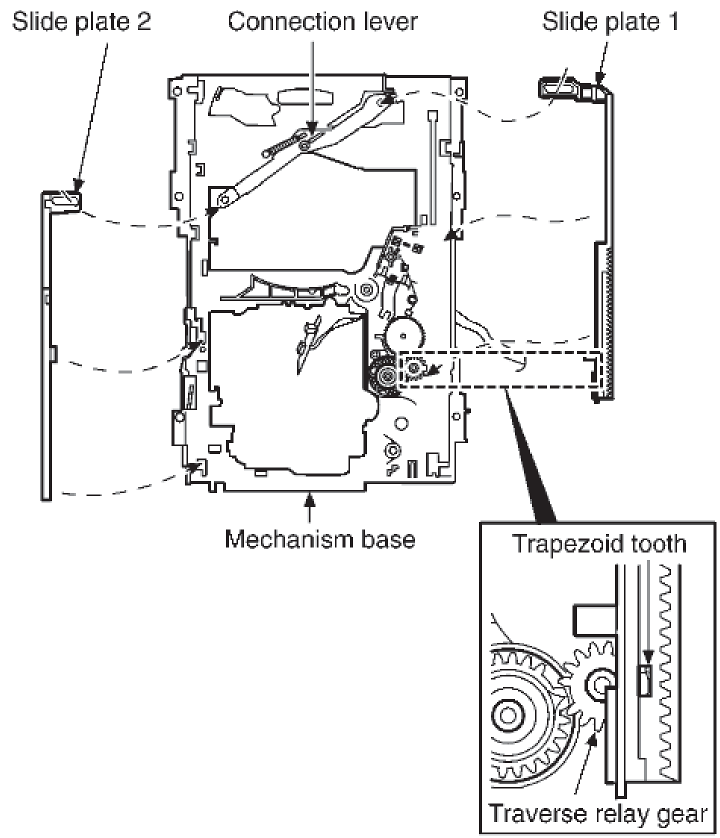
Step 1 Install the traverse cam gear.
Step 2 Rotate the traverse cam gear to the direction of arrow.



Step 3 Install the drive gear and traverse relay gear.

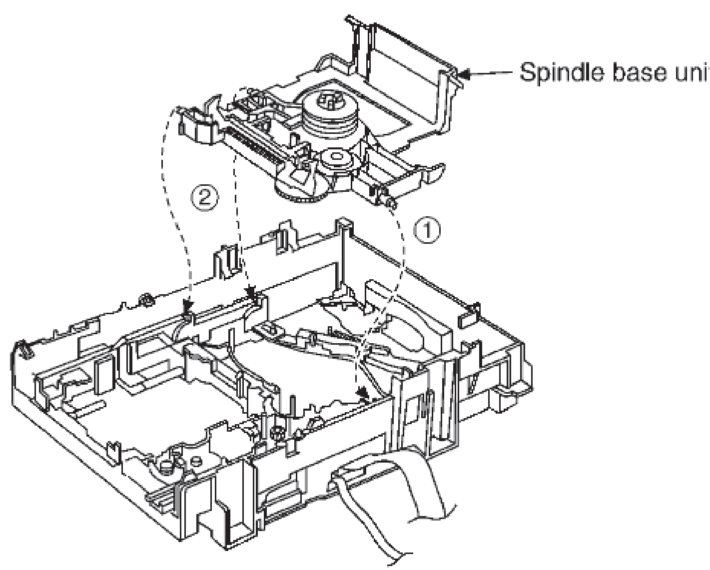


*When installing the traverse relay gear, align the trapezoid tooth of gear with tooth of traverse cam gear.

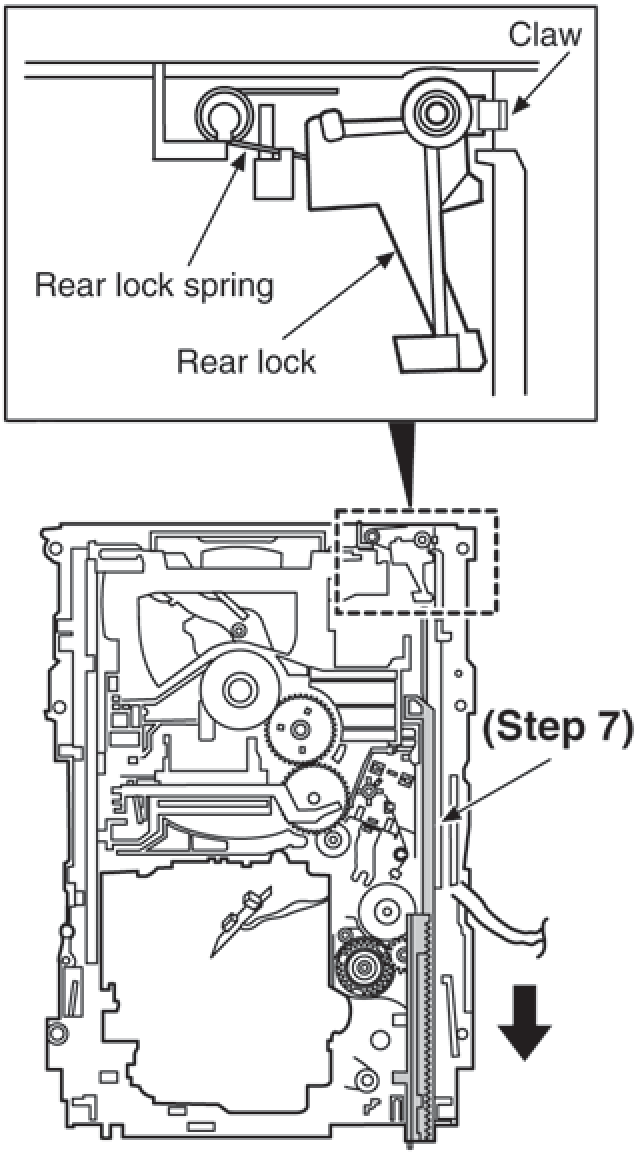


Step 4 Install the slide plate 2 to the mechanism base, and then match to the connection lever.

Step 5 Install the slide plate 1 to the mechanism base, and then match to the connection leve and align the trapezoid tooth of traverse relay gear with the slide plate 1.



Step 6 Install the spindle base unit. (First, slide plate 1.)



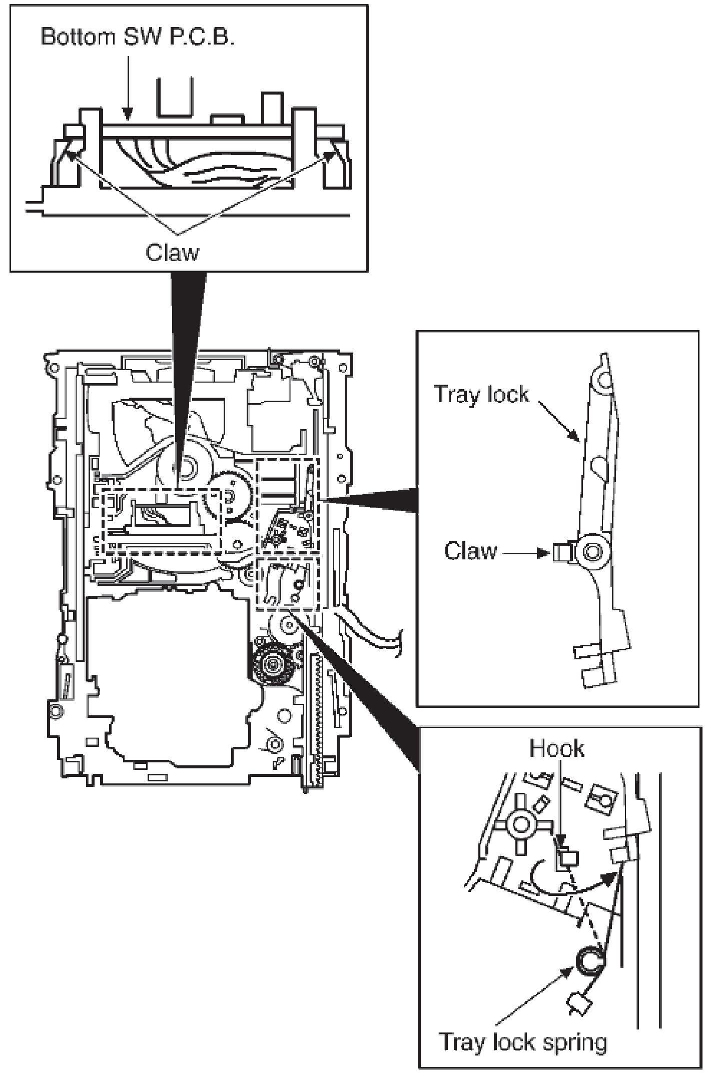
(Front side)

Step 7 Move the slide plate 1 to forward fully.

Step 8 Install the rear lock. (The claw should be latched.)

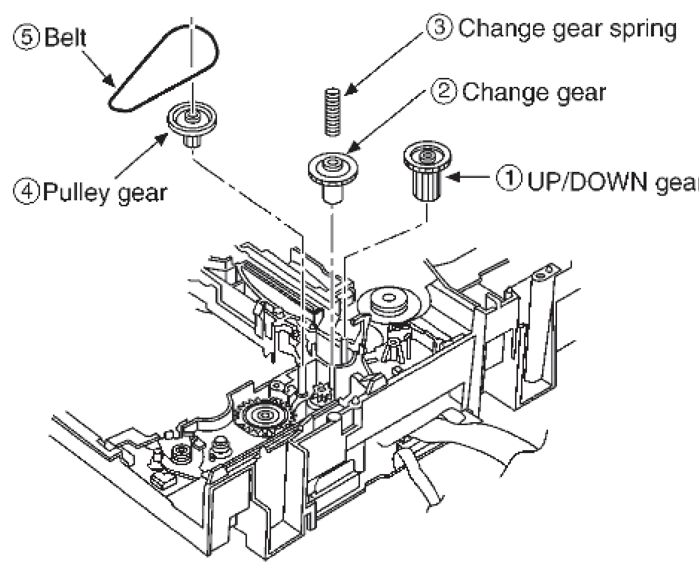
Step 9 Install the Spindle Position P.C.B.. (The claw should be latched.)

Step 10 Install the tray lock. (The claw should be latched.)

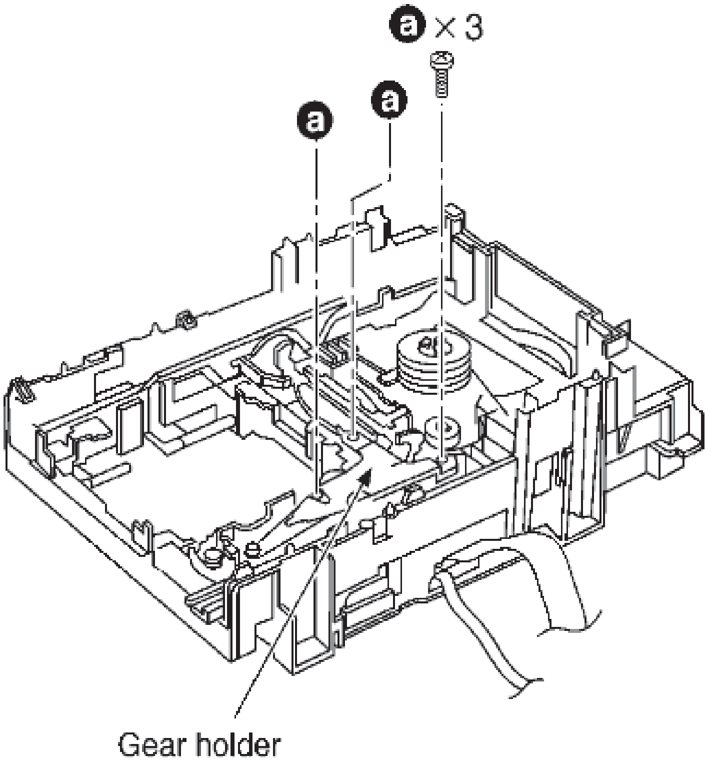


Step 11 Remove the tray lock spring from hook,and then latch to the tray lock.

Step 12 Install the UP/DOWN gear, change gear, change gear spring, pulley gear and belt in the order of (1) - (5).



Step 13 Install the gear holder, and then tighten the screw (a).



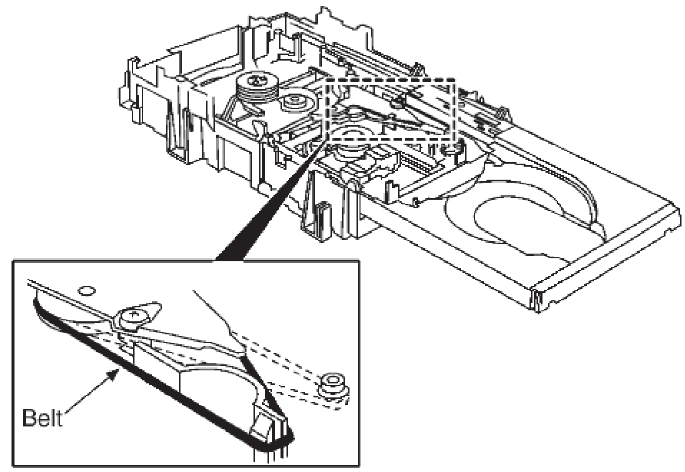
Step 14 Install the tray base, traverse ass'y, mechanism cover and upper plate.

[Operation check after servicing]

Check the proper operation of following items with gear and hexagonal screwdriver.

1. Open/close of tray base.
2. Moving the tray base to the stock side.
3. UP/DOWN operation of spindle base unit.
4. UP/DOWN operation of traverse ass'y.

10.12.4 Replacement for the motor ass'y

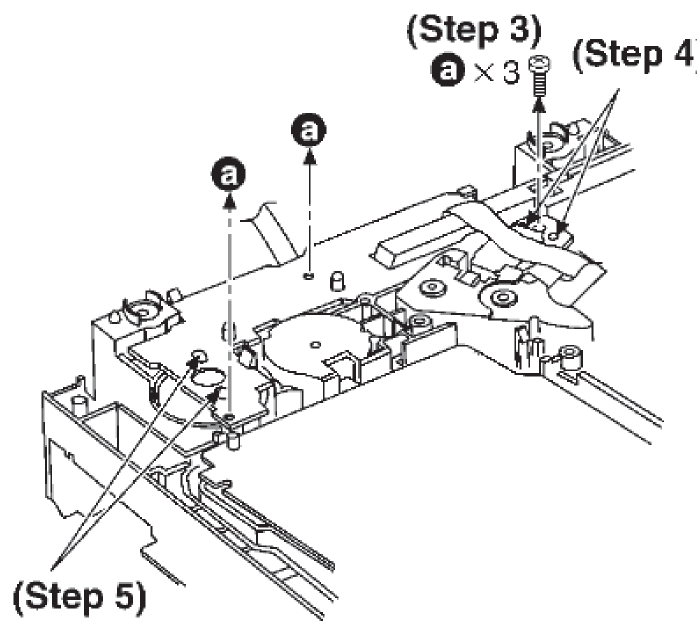


Step 1 Install the belt temporarily.

NOTE:
Take care not apply the grease to the belt.

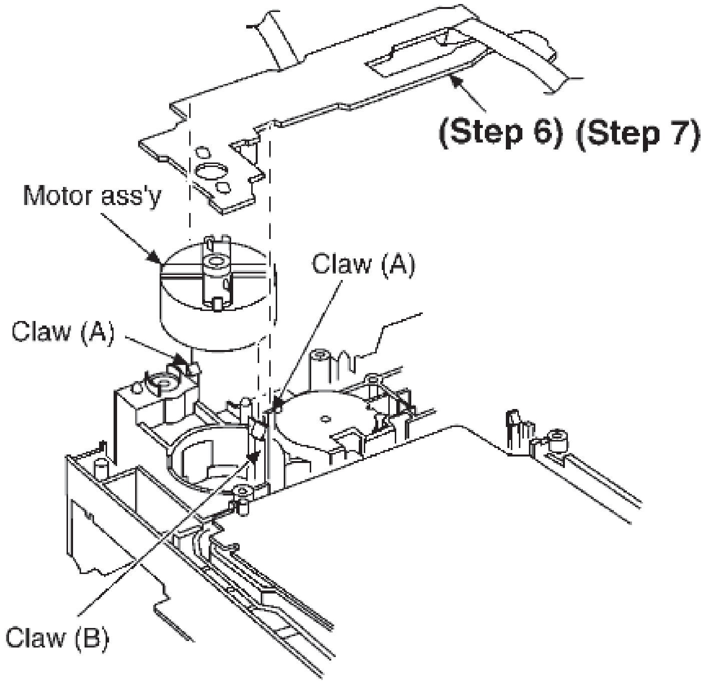
Step 2 Upset the CD loading unit.

Step 3 Remove 3 screws



Step 4 Unsolder the plunger terminals (2 points).

Step 5 Unsolder the motor terminals (2 points).

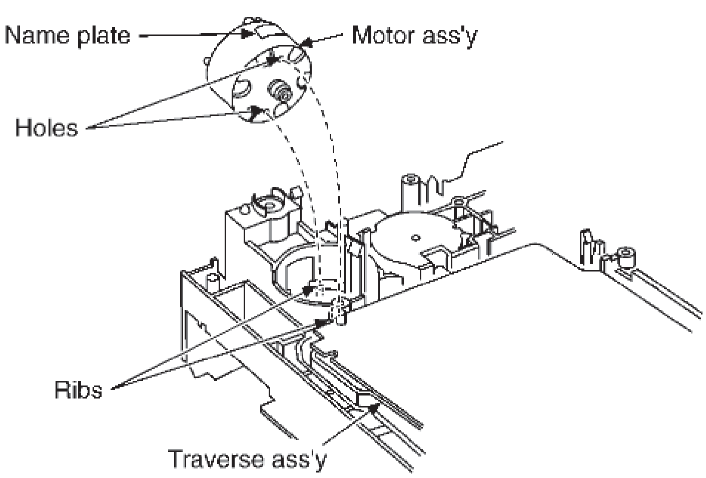


Step 6 Release the 2 claws (A), and then remove the Motor P.C.B.

Step 7 Release the claw (B), and then remove the motor ass'y.

[Notice for motor ass'y installation]

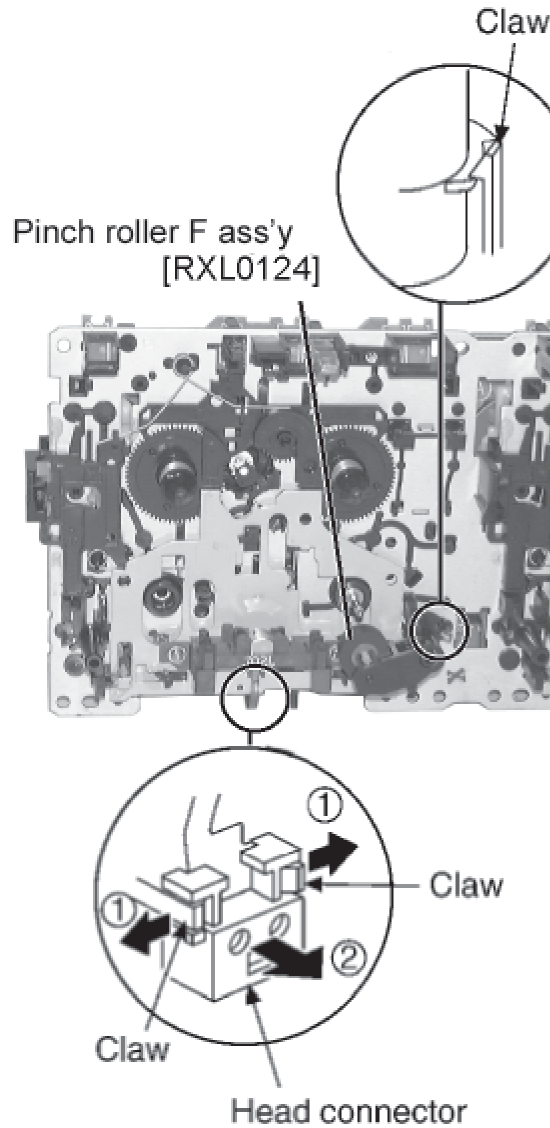
1. Locate the name plate of motor to the traverse ass'y.
2. Align the hole of motor with the ribs.



10.13 Replacement for the pinch roller ass'y and head block

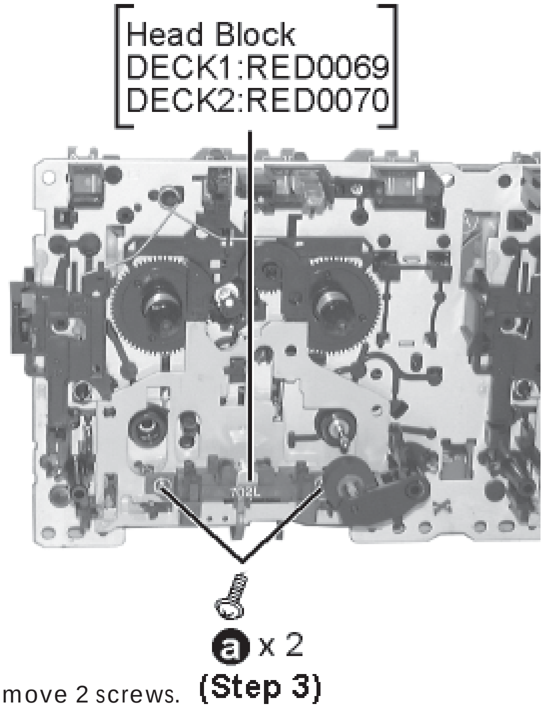
- Follow the (Step 1) - (Step 2) of Item 10.2 - Disassembly of Top Cabinet
- Follow the (Step 1) - (Step 6) of Item 10.3 - Disassembly of CD Lid
- Follow the (Step 1) of Item 10.4 - Disassembly of the Rear Panel
- Follow the (Step 1) - (Step 3) of Item 10.5 - Disassembly of the CD Mechanism Unit
- Follow the (Step 1) - (Step 3) of Item 10.9 - Disassembly of the Front Panel Unit
- Follow the (Step 1) - (Step 5) of Item 10.10 - Disassembly of the Deck Mechanism Unit

*** The mechanism as shown below is for DECK1. For DECK 2, perform the same procedures.**



Step 1 Release the 2 claws, and then remove the pinch roller (R), (F).

Step 2 Release ther 2 claws, and then remove the head connector



Step 3 Remove 2 screws.

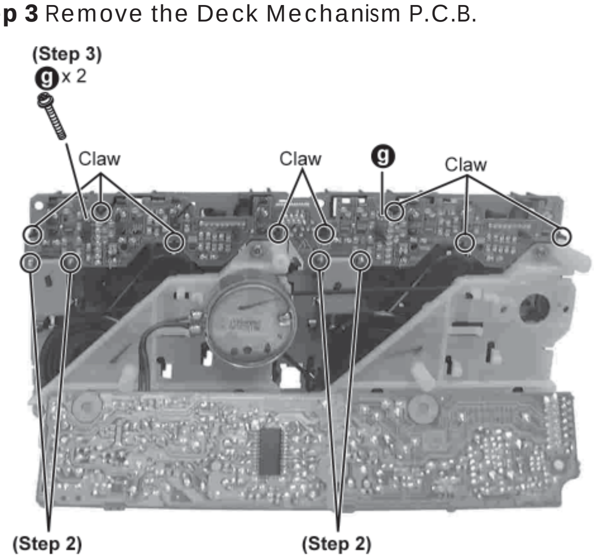
10.14 Replacement for the pinch roller ass'y , capstan belt A, capstan belt B and winding belt

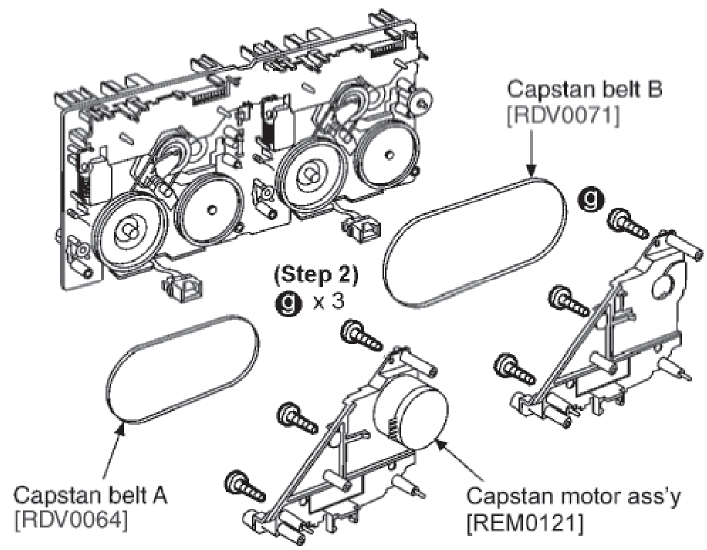
- Follow the (Step 1) - (Step 2) of Item 10.3 - Disassembly of Top Cabinet
- Follow the (Step 1) - (Step 6) of Item 10.4 - Disassembly of CD Lid
- Follow the (Step 1) of Item 10.5 - Disassembly of the Rear Panel
- Follow the (Step 1) - (Step 3) of Item 10.6 - Disassembly of the CD Mechanism Unit
- Follow the (Step 1) - (Step 3) of Item 10.10 - Disassembly of the Front Panel Unit
- Follow the (Step 1) - (Step 5) of Item 10.11 - Disassembly of the Deck Mechanism Unit.

Step 1 Release the 2 claws, and then remove the head connector.

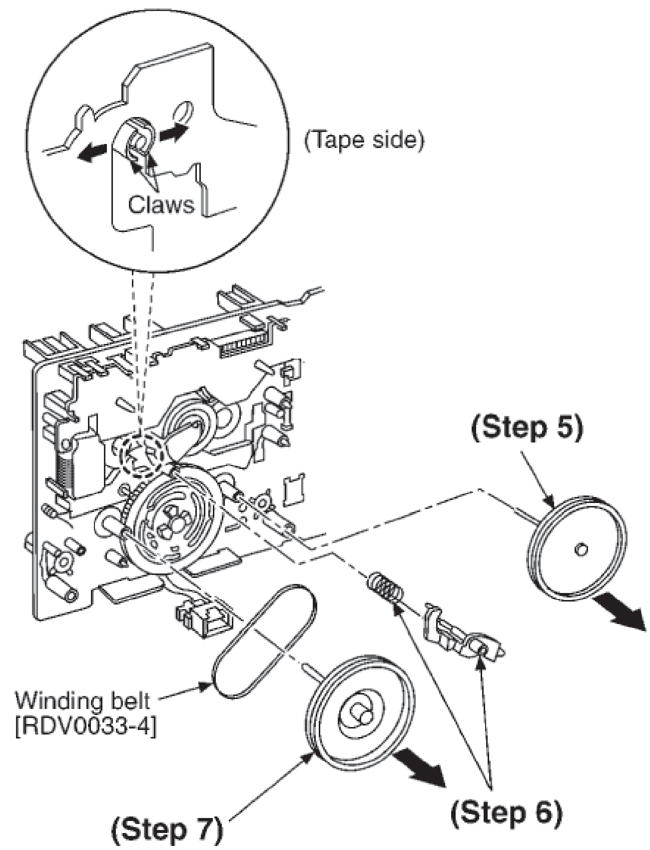
Step 2 De-solder plunger point.

Step 3 Remove the Deck Mechanism P.C.B.





Step 4 Remove 3 screws.

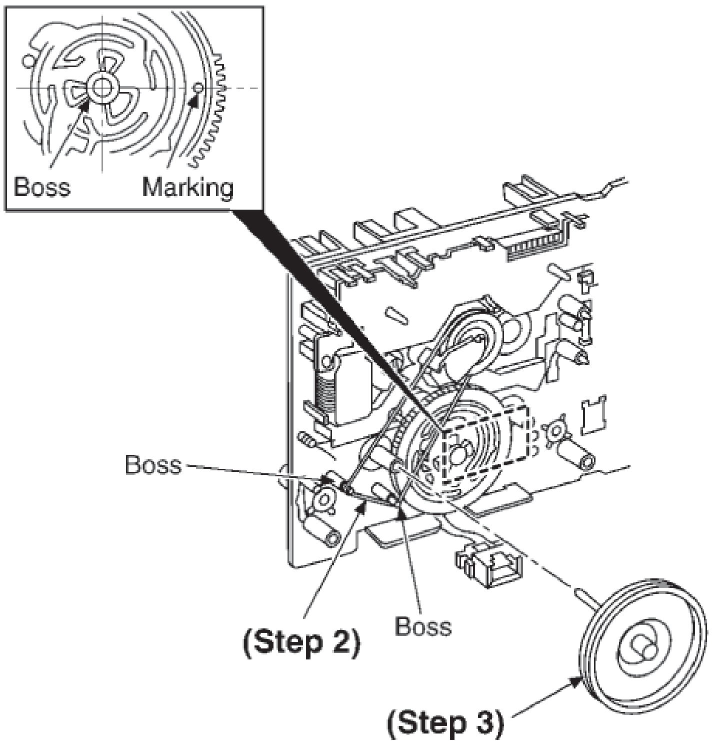


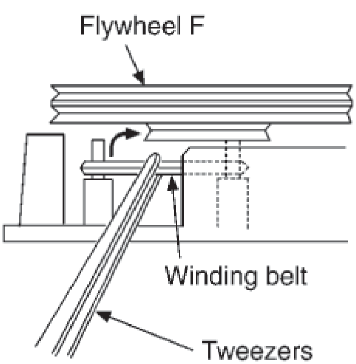
Step 5 Remove the flywheel R.

Step 6 Release the claw of tape side, and then remove the winding lever and spring.
Step 7 Remove the flywheel F.

[Installation of the belt]

Step 1 The boss and marking should be positioned horizontally.





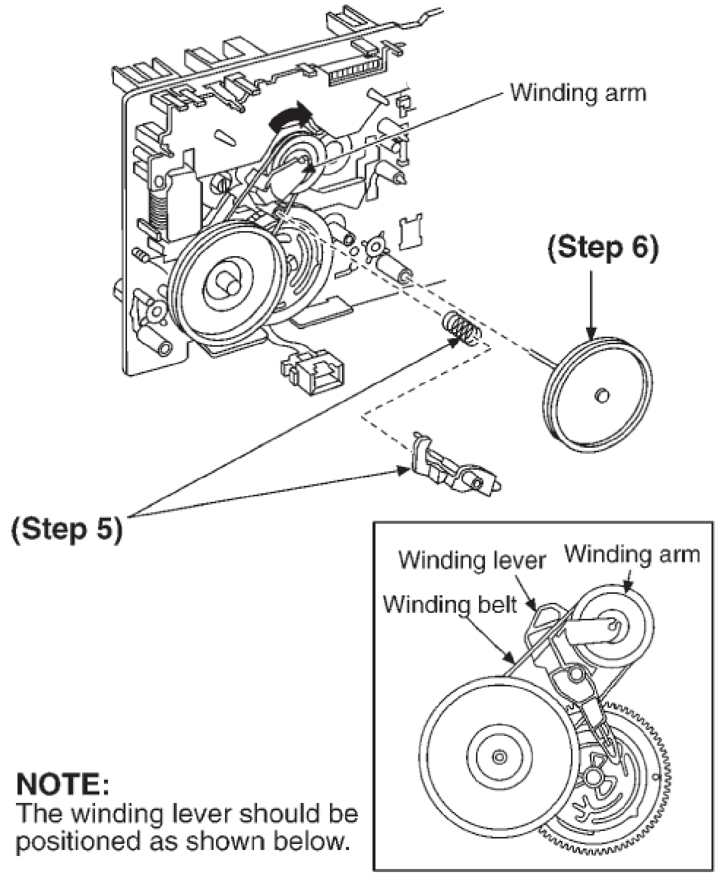
Step 2 Put the winding belt on the pulley temporarily.

Step 3 Install the flywheel F.

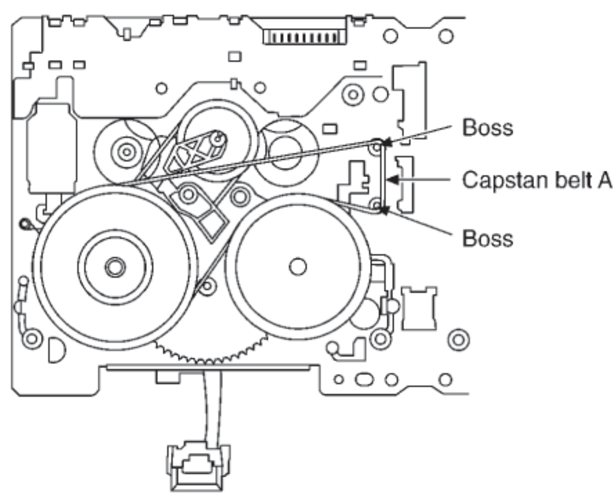
Step 4 Put the winding belt on the flywheel F.

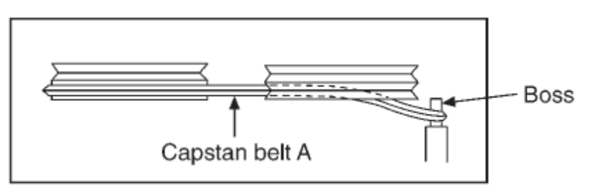
Step 5 Install the winding lever and spring while pressing the winding arm in the direction of arrow.

Step 6 Install the flywheel R.



Step 7 Put the capstan belt A temporarily as shown below.

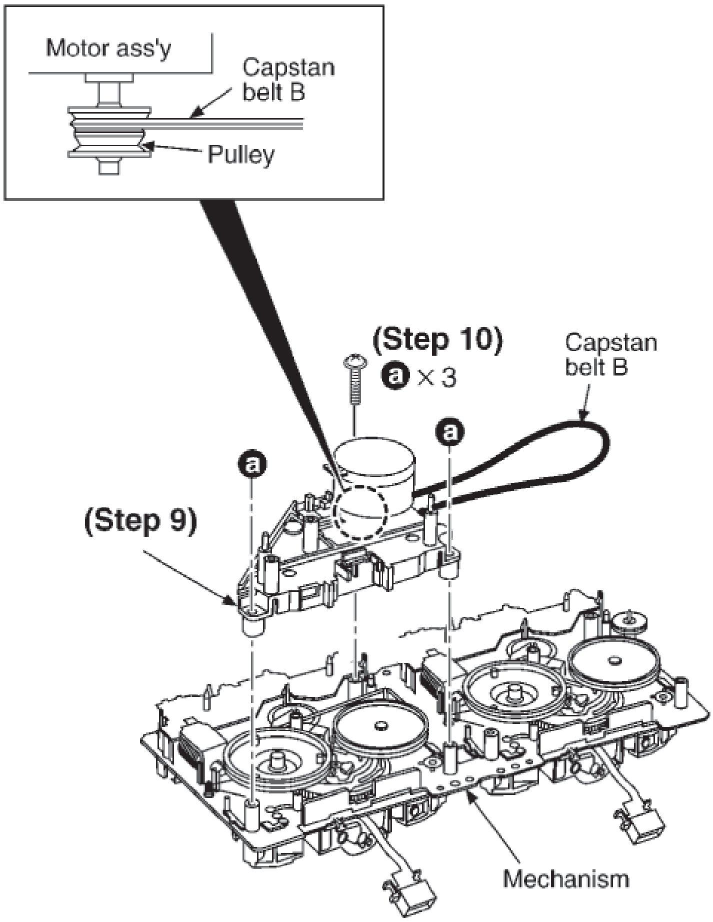




(Side view)

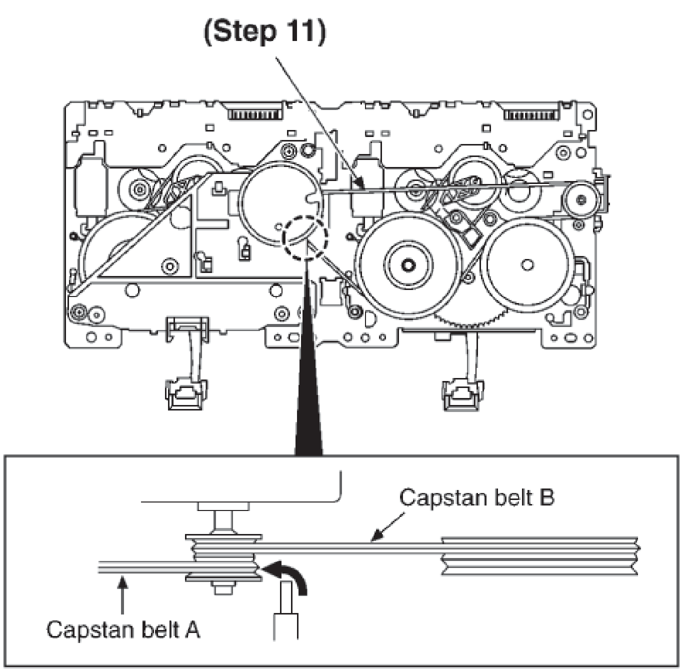
Step 8 Put the capstan belt B on the motor ass'y pulley.

Step 9 Install the sub chassis to the mechanism, and then tighten screws.



Step 10 Remove 3 screws.

Step 11 Put the capstan belt B as shown below.



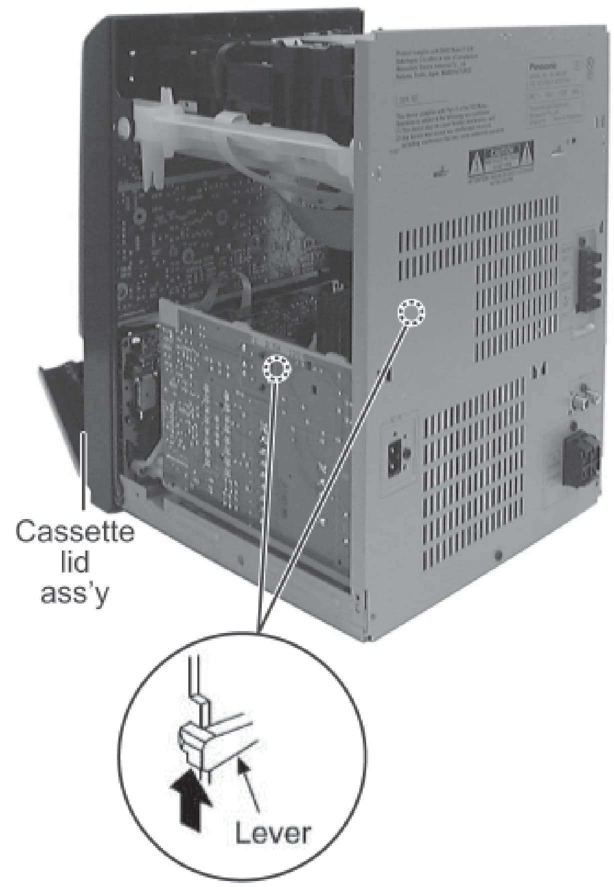
Step 12 Put the capstan belt A on the motor ass'y pulley.

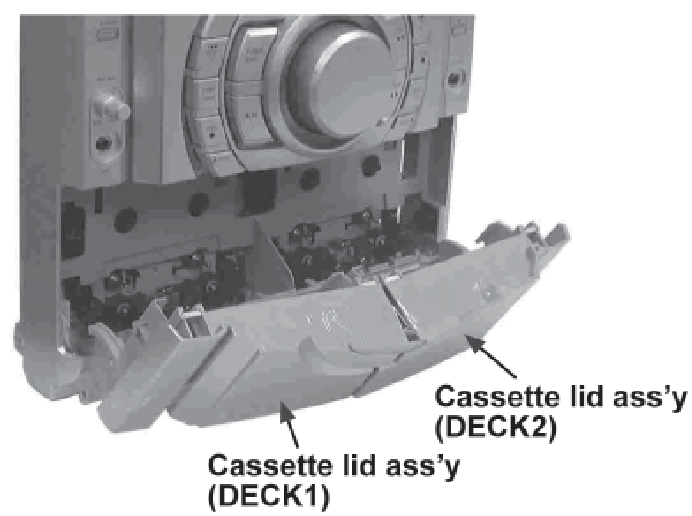
10.15 Replacement for the cassette lid ass'y

- Follow the (Step 1) - (Step 2) of Item 10.3 - Disassembly of Top Cabinet

Step 1 Force the lever upward, open the cassette lid ass'y. (For DECK1 and DECK2)

Step 2 Lift up the cassette lid ass'y in the direction of arrow. (For DECK1 and DECK2).

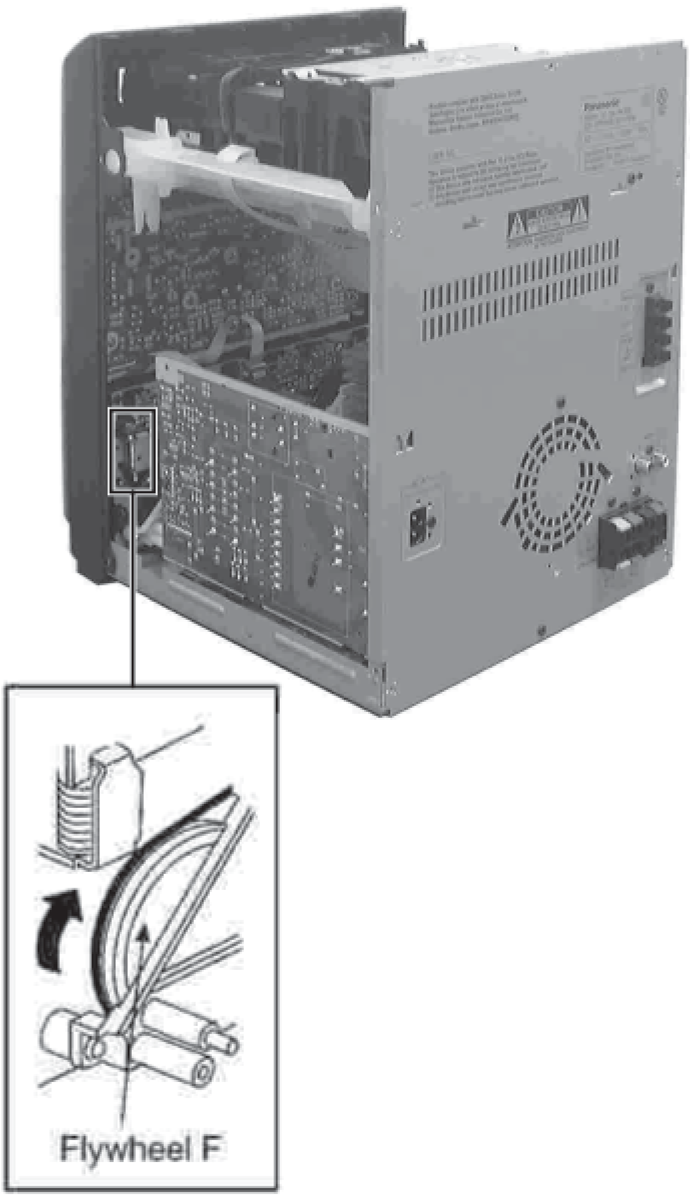




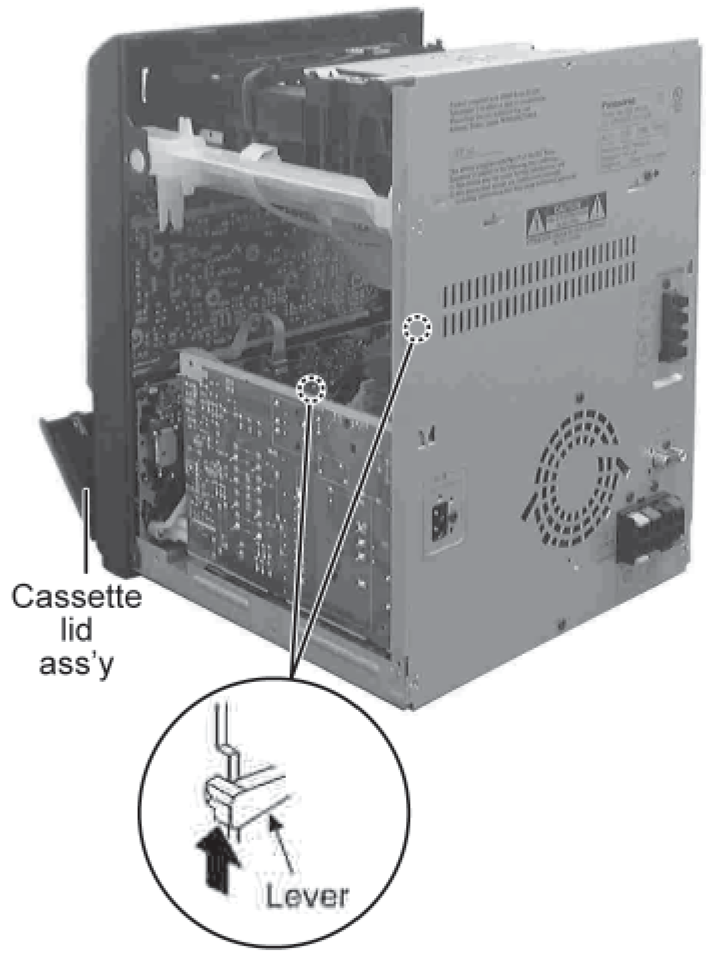
10.16 Rectification for tape jam problem

- Follow the (Step 1) - (Step 2) of Item 10.3 - Disassembly of Top Cabinet

Step 1 If a cassette tape cannot be removed from the deck since the tape is caught by the capstan or pinch roller during playback or recording, rotate the flywheel F in the direction of the arrow to remove the tape.



Step 2 Force the lever upward and open the cassette lid ass'y. Take the cassette tape off.



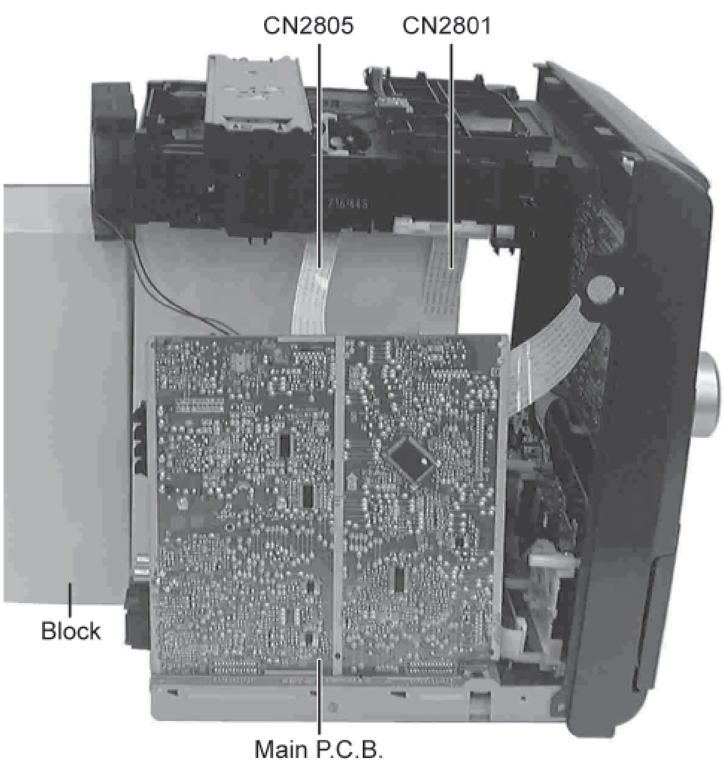
11 Checking for major P.C.B.

Note:
Checking of all major P.C.Bs (Main P.C.B., Panel P.C.B., Deck P.C.B., Deck Mechanism P.C.B., Transformer P.C.B., Power P.C.B.) can be carried out using below procedures.

For the disassembling procedure, see Section 10.

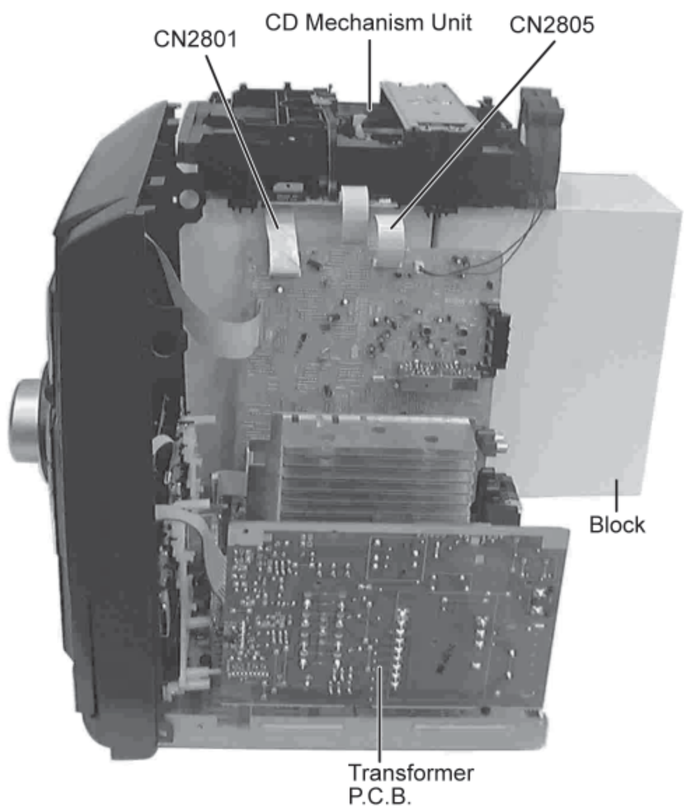
11.1 Checking for Main P.C.B.

1. Remove Top Cabinet and Rear Panel.
2. Remove CD Lid.
3. Remove CD Mechanism Unit.
4. Connect FFC wires (CN2801 & CN2805) from CD Mechanism Unit



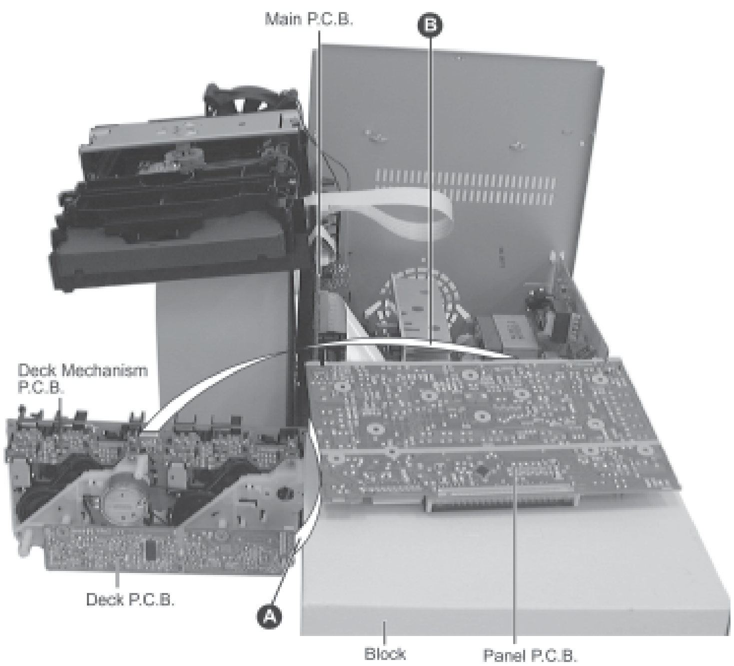
11.2 Checking for Transformer P.C.B.

1. Remove Top Cabinet and Rear Panel.
2. Remove CD Lid.
3. Remove CD Mechanism Unit.
4. Connect FFC wires (CN2801 & CN2805) from CD Mechanism Unit.



11.3 Checking of Panel, Deck& Deck Mechanism P.C.B.

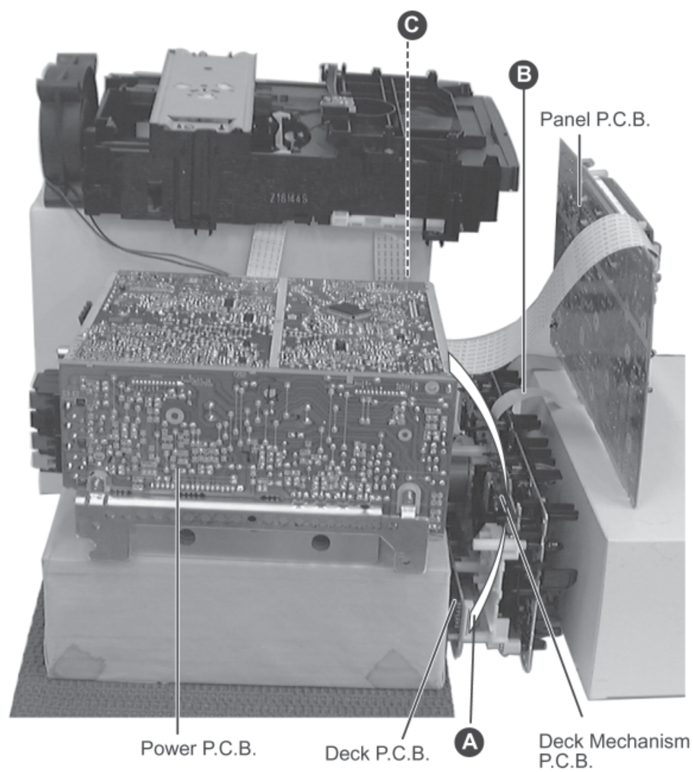
1. Remove Top Cabinet.
2. Remove CD Lid.
3. Remove CD Mechanism Unit.
4. Remove volume knob at front panel.
5. Remove Panel P.C.B.
6. Remove Deck Mechanism Unit.
7. Use the extension cable (A) to reconnect (CN1001) Deck P.C.B. and (CN2803) Main P.C.B.
8. Use the extension cable (B) to reconnect (CP6401) Panel P.C.B. and (CN971) Deck Mechanism P.C.B.



Service Tools	
Extension FFC	
(A) Deck P.C.B. - Main P.C.B. (14 Pins)	REEX0485
(B) Panel P.C.B. - Deck Mechanism P.C.B. (10 Pins)	REEX0484

11.4 Checking the Power P.C.B.

1. Remove Top Cabinet and Rear Panel.
2. Remove CD Lid.
3. Remove CD Mechanism Unit.
4. Remove 3 screws at Transformer P.C.B..
5. Remove 2 screws at heat sink and 1 screw at Power P.C.B.
6. Flip the Power P.C.B.
7. Insulate the Power P.C.B. with insulation material to avoid short circuit.
8. Use the extension cable (A) to reconnect (CN1001) Deck P.C.B. and (CN2803) Main P.C.B.
9. Use the extension cable (B) to reconnect (CP6401) Panel P.C.B. and (CN971) Deck Mechanism P.C.B.
10. Use the extension cable (C) to reconnect (H5950/ W5950) Power P.C.B. and (CN5950) Transformer P.C.B.



Service Tools	
Extension FFC	
(A) Deck P.C.B. - Main P.C.B.	REEX0485 (14 Pins)
(B) Panel P.C.B. - Deck Mechanism P.C.B.	REEX0484 (10 Pins)
(C) Power P.C.B. - Transformer P.C.B.	RFKAK330 (9 Pins)

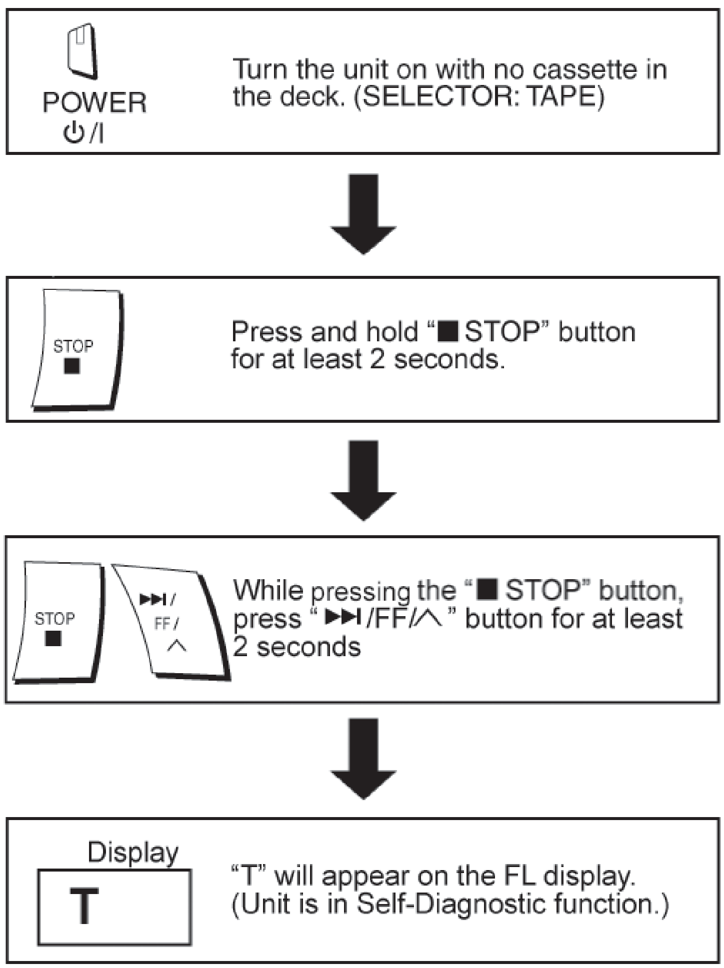
12 Self-Diagnostic Function

12.1 Self-diagnostic display

This unit is equipped with a self-diagnostic display function which, if a problem occurs, will display an error code corresponding to the problem.

Use this function when performing maintenance on the unit.

12.2 How to enter the Self-Diagnostic Function



12.3 Cassette Mechanism Test (For error code H01, H02, H03, F01)

1. Press "TAPE, DECK 1/2" to select Deck 2.

2. Load a cassette tape with the erasure prevention tab, remove from left side only and close the cassette holder.

3. Press "FAST FORWARD MEMORY" (Tape will be stop after 2 seconds)

4. Load a cassette tape with the erasure prevention tab, remove from right side only and close the cassette holder.

5. Press "REVERSE FM MODE/BP" (Tape will be stop after 2 seconds)

6. Load a pre-recorded tape with both side record tabs intact and close the cassette holder.

7. Press "PLAY/TUNE/TIME ADJ UP" (After TPS function, tape will stop automatically)

8. Press "REC/STOP" (Tape will not move)

9. Press "STOP/TUNE MODE" to indicate Error code.

° If several problem exist, error code will change each time when " /STOP" is pressed. (e.g. H01 ! H03 ! F01 .....etc.)

10. Press "TAPE, DECK 1/2" to select Deck 1.

11. Repeat step 2 to 9 to test Deck 1. (Tape Deck 1 will not check H02 because of no recording function)

12.4 CD Mechanism Test (F15, F26, F16, F17, F27, F28, F29, F30, H15& H16)

1. Press "CD". [▶/II, CD]

2. Press "OPEN/CLOSE (1)" and place a CD. [⏏, OPEN/CLOSE]

3. Press "OPEN/CLOSE (1)" to close the tray. [⏏, OPEN/CLOSE]

4. Press "OPEN/CLOSE (5)" and wait until the tray is open. [⏏, OPEN/CLOSE]

5. Press "OPEN/CLOSE (1)" and remove the CD.

6. Press "OPEN/CLOSE (1)" to close the tray. [⏏, OPEN/CLOSE]

7. Press "/STOP" to indicate Error Code. [⏏, OPEN/CLOSE]

° If several problem exist, error code will change each time when "/STOP" is pressed. (e.g. F15 ! F26 ! F16 ....etc).

12.5 To clear all Error code

1. Press "STOP/TUNE MODE" button for 5 seconds.

[■, STOP]

2. FL indicator shows "CLEAR" for 1 second and change to "T".

12.6 How to get out from Self-Diagnostic function

1. Press "Power" button OFF.

[⏻/I, POWER]

12.7 Power Amplifier Failure (F61)

1. When power amplifier fail, F61 will indicate automatically.

12.8 Description of Error Code

12.8.1 Abnormality detection for Deck Mechanism block

No.	Abnormal Items	Error Display	Method of Detection
1	MODE SW abnormal	H01	Normal operation during mecha transition. MODE SW abnormal is memorized. The content of abnormality can be confirmed in the abnormal detection mode explained in the later section.
2	REC INH SW abnormal	H02	The content of abnormality can be confirmed in the abnormal detection mode explained in the later section.
3	HALF SW abnormal	H03	The content of abnormality can be confirmed in the abnormal detection mode explained in the later section.
4	Reel pulse abnormal	F01	The content of abnormality can be confirmed in the abnormal detection mode explained in the later section.

12.8.2 Abnormality detection for CD/Changer block

No.	Abnormal Items	Error Display	Method of Detection
1	REST SW abnormal	F15	Under normal operation (Self-Diagnostic Mode inclusive), this error occurs when the REST SW ON is not detected within the specified time and shall be memorized.
2	Transmission error between	F26	Under normal operation (Self-Diagnostic Mode inclusive), this error occurs when CD servo LSI and micon the selection is set to CD and SENSE='H' is detected and SENSE='L' is notdetected within a fail safe time (20ms) after system command transmission was sent.
3	CLAMP SW abnormal	F16	Refer to section 12.8.4 (Mechanism Error Code Table) [M-0A] error is detected.
4	BOTTOM SW abnormal	F17	Refer to section 12.8.4 (Mechanism Error Code Table) [M-09] error is detected.
5	POSITION SW abnormal	F27	Refer to section 12.8.4 (Mechanism Error Code Table) [M-05 ~ M-08] error is detected.
6	SW1 abnormal	F28	Refer to section 12.8.4 (Mechanism Error Code Table) [M-02 ~ M-08] error is detected.
7	SW2 abnormal	F29	Refer to section 12.8.4 (Mechanism Error Code Table) [M-02 ~ M-08] error is detected.
8	OPEN SW abnormal	H15	Refer to section 12.8.4 (Mechanism Error Code Table) [M-01] error is detected.
9	CLOSE SW abnormal	H16	Refer to section 12.8.4 (Mechanism Error Code Table) [M-01] error is detected.
10	DISC SENSOR	F30	Refer to section 12.8.4 (Mechanism Error Code Table) [M-01] error is detected.

12.8.3 Power supply related error detection

No.	Abnormal Items	Error Display	Method of Detection
1	POWER AMP	F61	During normal operation, if DCDET 1/2 becomes ‘L’, normal POWER OFF process shallnot be output abnormal executed, PCNT shall be switched to ‘L’ immediately. GOODBYE shall not be displayedand the error display F61 will be displaye instead.2 seconds after the F61display, ECONO shall be set to ‘L’ and FL display shall be turned off.The error content shall be memorized when the abnormality occurs and canbe displayed in the C-mecha self-diagnostic mode described later.

12.8.4 Error Code (CR20 Mechansim)

1. If mechanism problem occurs during normal or aging mode, the error code is “remembered” and shown on the FL display.

2. Reset Condition of Error Code

   A During cold start of micro-processor IC.

   B Restart of aging mode for the mechanism unit.

3. Mechanism Error Code

   Mechansim Error Code Table

Error Code	Description
M-00	No Error
M-01	OPEN Position - Horizontal Motion Abnormality at play position
M-02	PLAY Position - Horizontal Motion Abnormality at stock position
M-03	PLAY Position - Horizontal Motion Abnormality during changing position
M-04	CHANGE Position - Horizontal Error of Stock position
M-05	CHANGE Position - Ascending motion Error
M-06	CHANGE Position - Descending motion Error
M-07	STOCK Position - Ascending motion Error
M-08	STOCK Position - Descending motion Error
M-09	Abnormality during change position (bottom switch)
M-0A	Clamp Error
M-0B	Access Failure - Access Time of more tha 30 secs (Total time of automatic ! Read TOC ! Track access)

4. When the mechanism unit stops due to error during aging model, error code is remembered and counts of the errors are displayed on the FL display.

13 CD Test Mode Function

This CD test mode is provided to check CD unit without connecting to changer loading mechanism. This mode shall operate CD PLAY with CD unit being connected only and CD Automatic Alignment result is shown on FL display.

13.1 How to set CD test mode



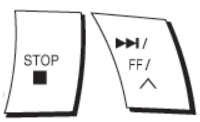
Press CD.

↓



Press and hold "■STOP" button for at least 2 seconds.

↓



While pressing the "■ STOP" button, press "►►I/FF/∧" button for at least 2 seconds

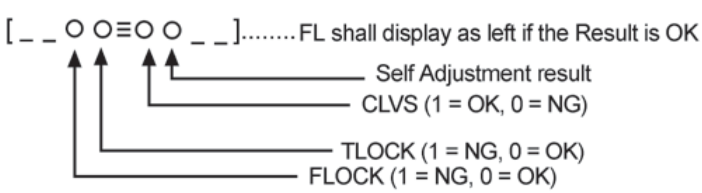
↓

Display: CD TEST

"CD TEST" will appear on the FL display.
(Unit is in CD test mode.)

13.2 CD Automatically Adjustment result indication

Under CD test mode, pressing the numeric key '0' on the remote controller will display the auto adjustment result. FLOCK, TLOCK and CLVS status shall be shown as below:



During the above display, executing CD PLAY will display auto adjustment result for CD PLAY mode.

13.3 CD Mecha Aging Test Mode (CR20)

1. Functional summary of CD aging test mode

It is for the purpose to determine the reliability of the CD changer.

2. To enter into CD aging test mode

a) First, enter into self-diagnostic mode (Refer to Section 12.2. How to enter the Self-Diagnostic Function)

b) In the self-diagnostic mode, switch the SELECTOR to

[►/II, CD] and press

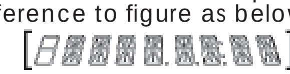
[I◄◄/REW/∨] . It will enter into CD aging test mode.

When in CD Aging test mode, the following operation will begin and repeated:

1. [DISC STOCKER] → DISC LOAD → TRAY OPEN (2 secs) → TRAY CLOSE] as one count.

2. DISC 1 → DISC 2 → DISC 3 → DISC 4 → DISC 5 → DISC1........repeating this endlessly.

· While performing the above operation, the FL display will show the number of its operations starting from 00001. With reference to figure as below.



· It shall move up one counter when the above operations ends. The counter will reset to 00000 when 99999 is reached.

· To exit CD aging test mode, press

[⏻/I, POWER] button, the tray will return to its PLAY position and power will be off.

13.4 Micon ROM Checksum and Version Display Mode

1. Functional Summary

Display version number and calculated checksum of the micon software.

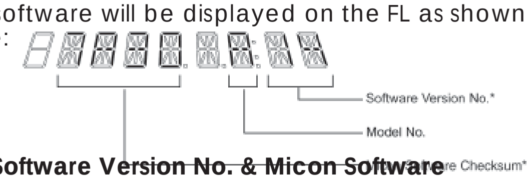
2. To enter into Micon ROM checksum and Version Display Mode.

a) Enter into Self-Diagnostic Mode (Refer to Section 12.2).

b) In the Self-Diagnostic Mode, Press

[►/II, CD] twice.

The version number and the calculated ROM Checksum of the current software will be displayed on the FL as shown in this example:



*** Note: The Software Version No. & Micon Software Checksum differs from set to set.**

· The ROM Checksum is calculated on demand, not hard coded.

· The ROM Checksum is calculated by talking the arithmetic SUM of the ROM contents form the programs's START address until the END address.

START address = [1080]H

END address = [FFFD]H

14 Measurements and Adjustments

14.1 Cassette Deck Section

- Measurement Condition
  - Make sure head, capstan and press roller are clean.
  - Judgeable room temperature 20 ± 5 °C (68 ± 9°F)
- Measuring instrument
  - EVM (DC Electronic voltmeter)
  - Digital frequency counter
- Test Tape
  - Tape speed gain adjustment (3 kHz, -10 dB); QZZCWAT

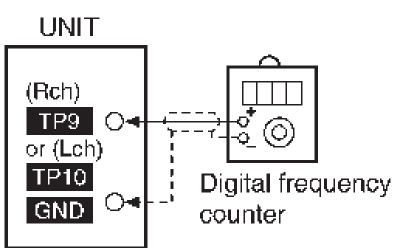
14.1.1 Tape Speed Adjustment (Deck 1/2)

1. Set the tape edit button to “NORMAL” position.
2. Insert the test tape (QZZCWAT) to DECK 2 and playback (FWD side) the middle portion of it.
3. Adjust Motor VR (DECK 2) for the output value shown below.

Adjustment target: 2940 ~ 3060 Hz (NORMAL speed)

4. After alignment, assure that the output frequency of the DECK 1 FWD are within ±60 Hz of the value of the output frequency of DECK 2 FWD.

Fig.1



14.1.2 Bias and Erase Voltage Check

1. Set the unit “AUX” position.
2. Insert the Normal blank tape (QZZCRA) into DECK 2 and the unit to “REC” mode (use “• REC/STOP” key).
3. Measure and make sure that the output is within the standard value.

Bias voltage for Deck 2	14±4mV (Normal)
Erase voltage for Deck 2	80mV (Normal)

Fig.2

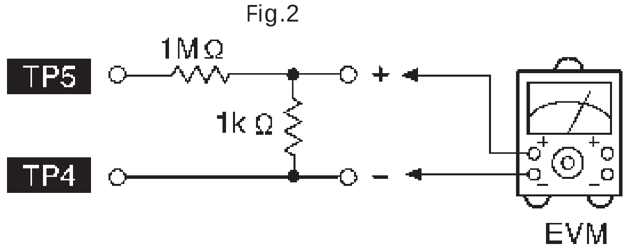
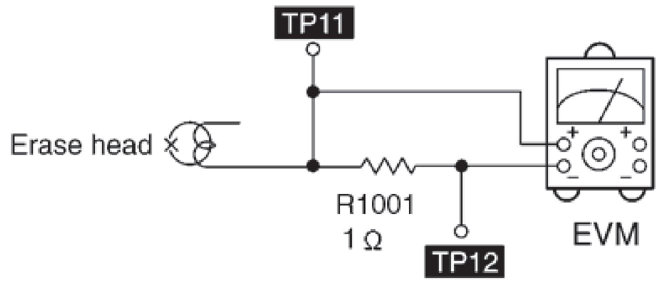


Fig.3

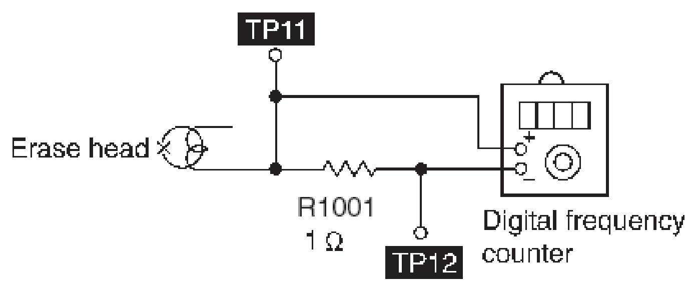


14.1.3 Bias Frequency Adjustment (Deck 1/2)

1. Set the unit to “AUX” position.
2. Insert the Normal blank tape (QZZCRA) into DECK 2 and set the unit to “REC” mode (• use “REC/STOP” key).
3. Adjust L1002 so that the output frequency is within the standard value.

Standard Value: 97 ±8 kHz

Fig.4



14.2 Tuner Section

14.2.1 AM-IF Alignment

1. Connect the instrument as shown in Fig.5.
2. Set the unit to AM mode.
3. Apply signal as shown in Fig. 5 from AM-SG.
4. Adjust Z2602 so that the output frequency is maximized in Fig.
6.

Fig.5

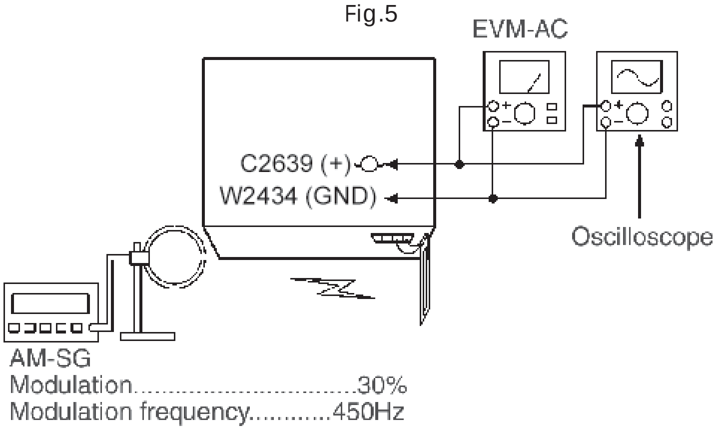
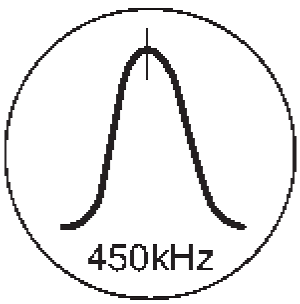


Fig.6



14.2.2 AM RF Adjustment

Connect the instrument as shown in Fig. 7.

Set the unit to AM mode.

Set AM-SG to 520kHz.

Receive 520kHz in the unit.

Adjust Z2602 (OSC) so that the EVM-AC is maximized.

Set AM-SG to 600Hz.

Receive 600Hz in the unit.

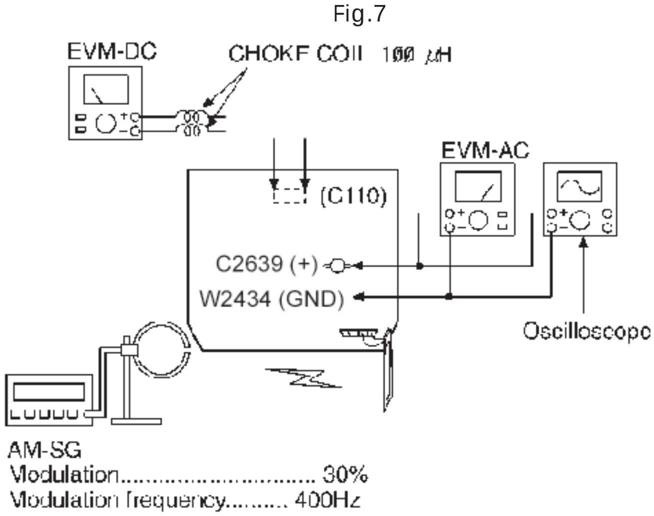
Adjust Z2602 (ANT) so that the EVM-SG is maximized.

Set AM-SG to 520kHz.

Receive 520kHz in the unit.

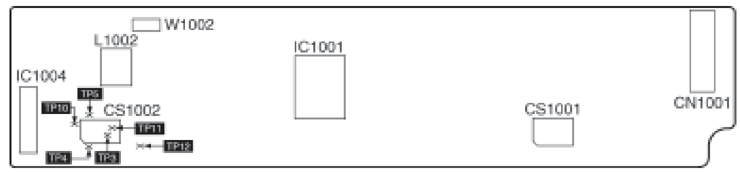
Adjust L2602 (OSC) so that the EVM-DC value is with 1.1±0.5V.

Fig.7

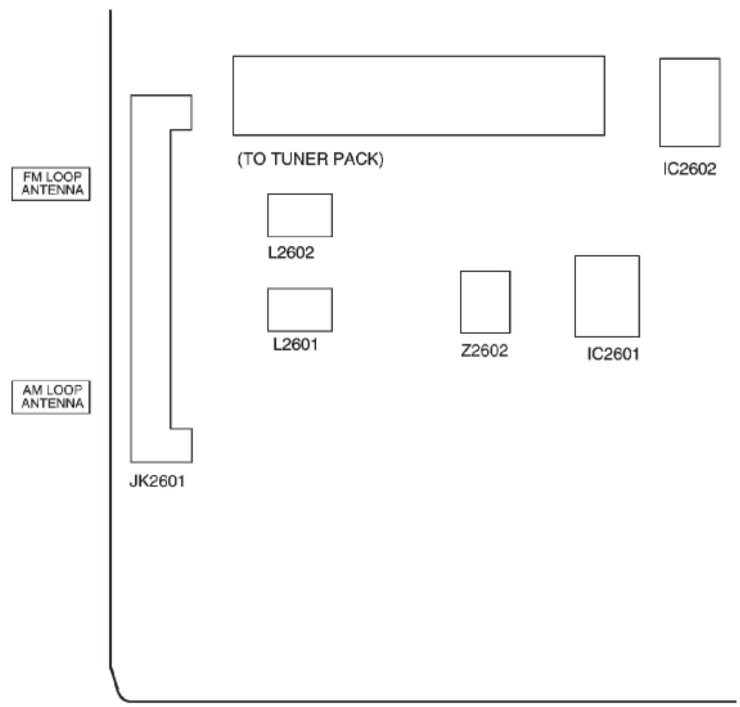


14.3 Alignment Points

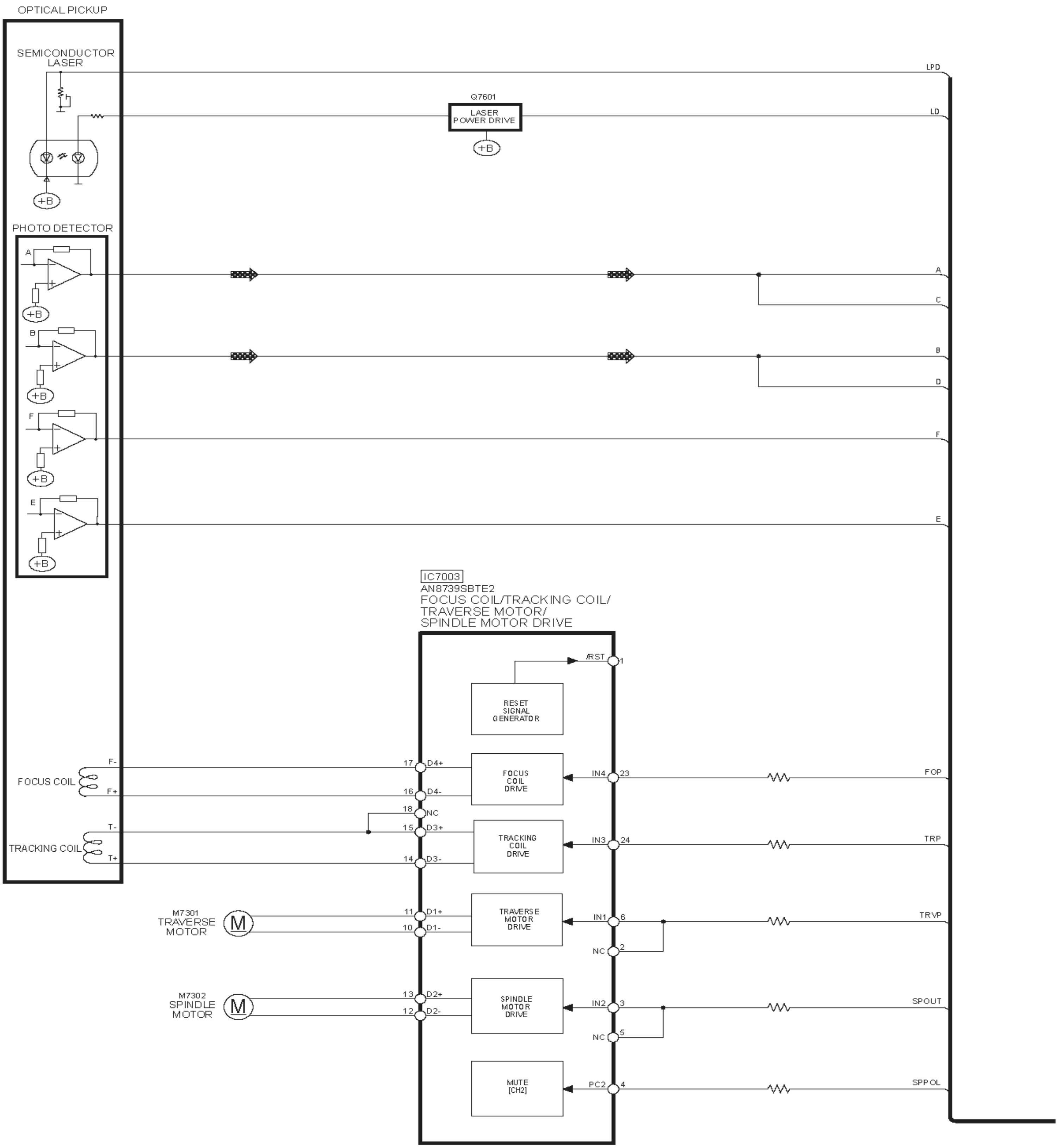
14.3.1 Cassette Deck Section

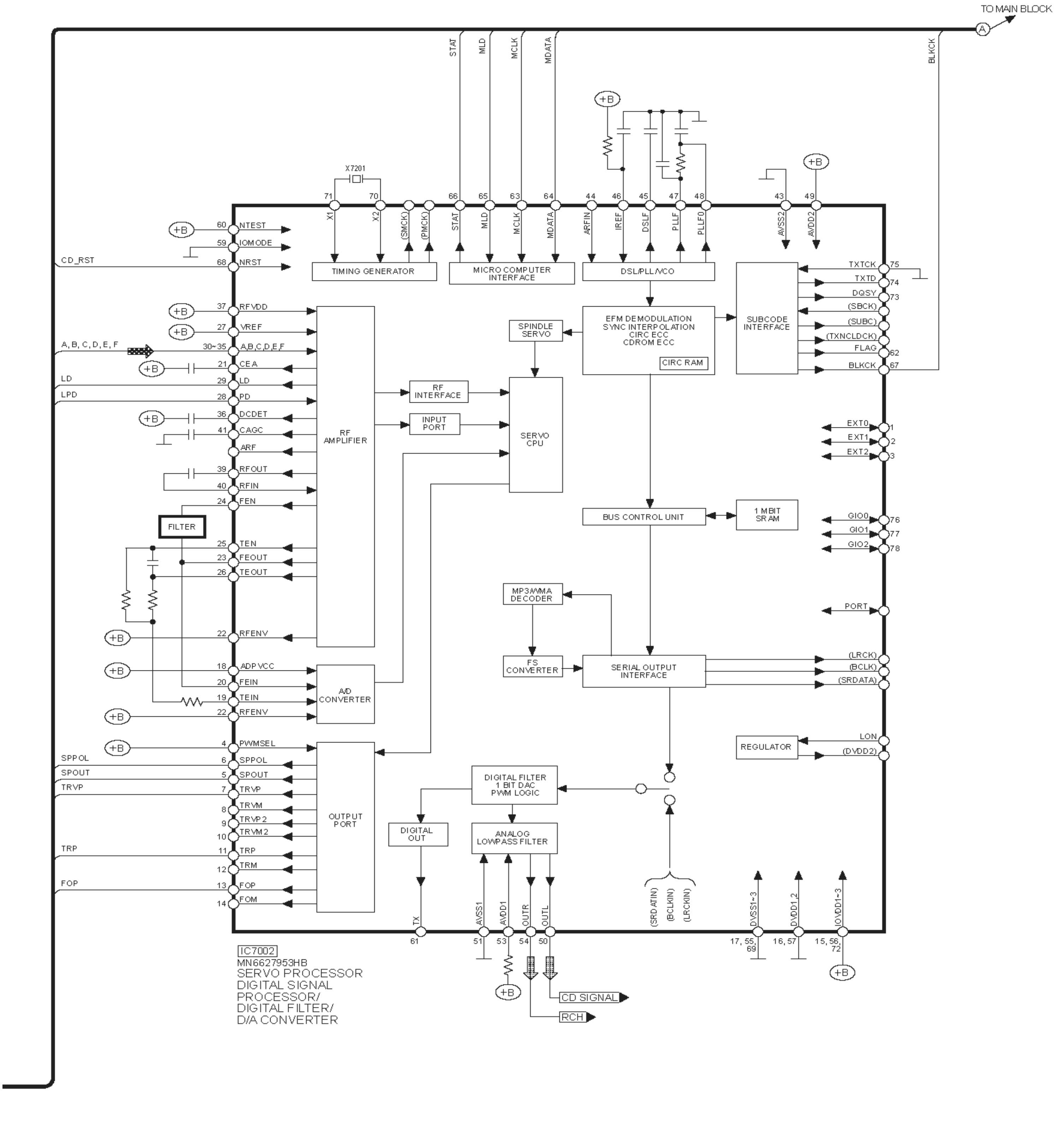


14.3.2 Tuner Section

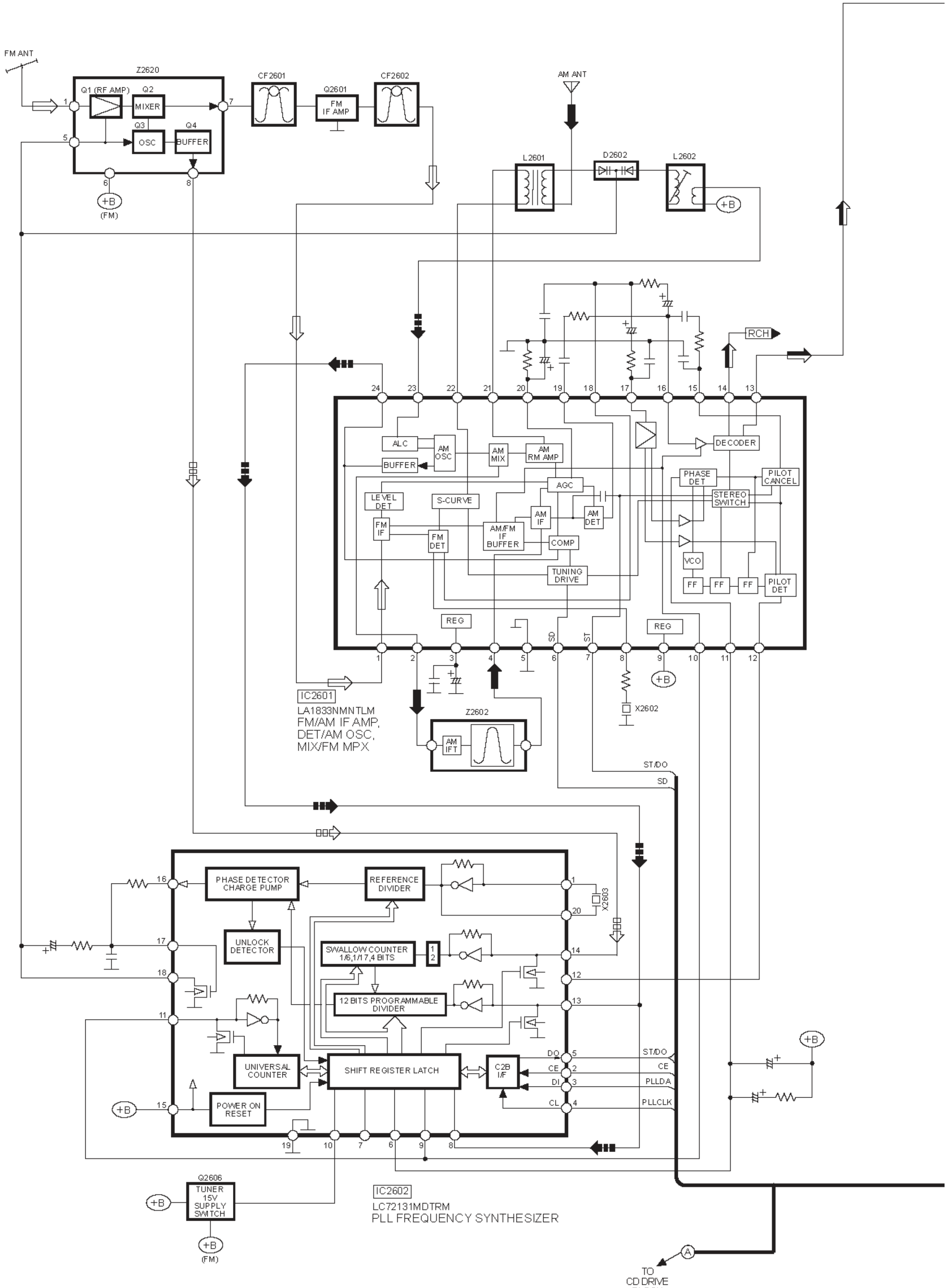


15 Block Diagram

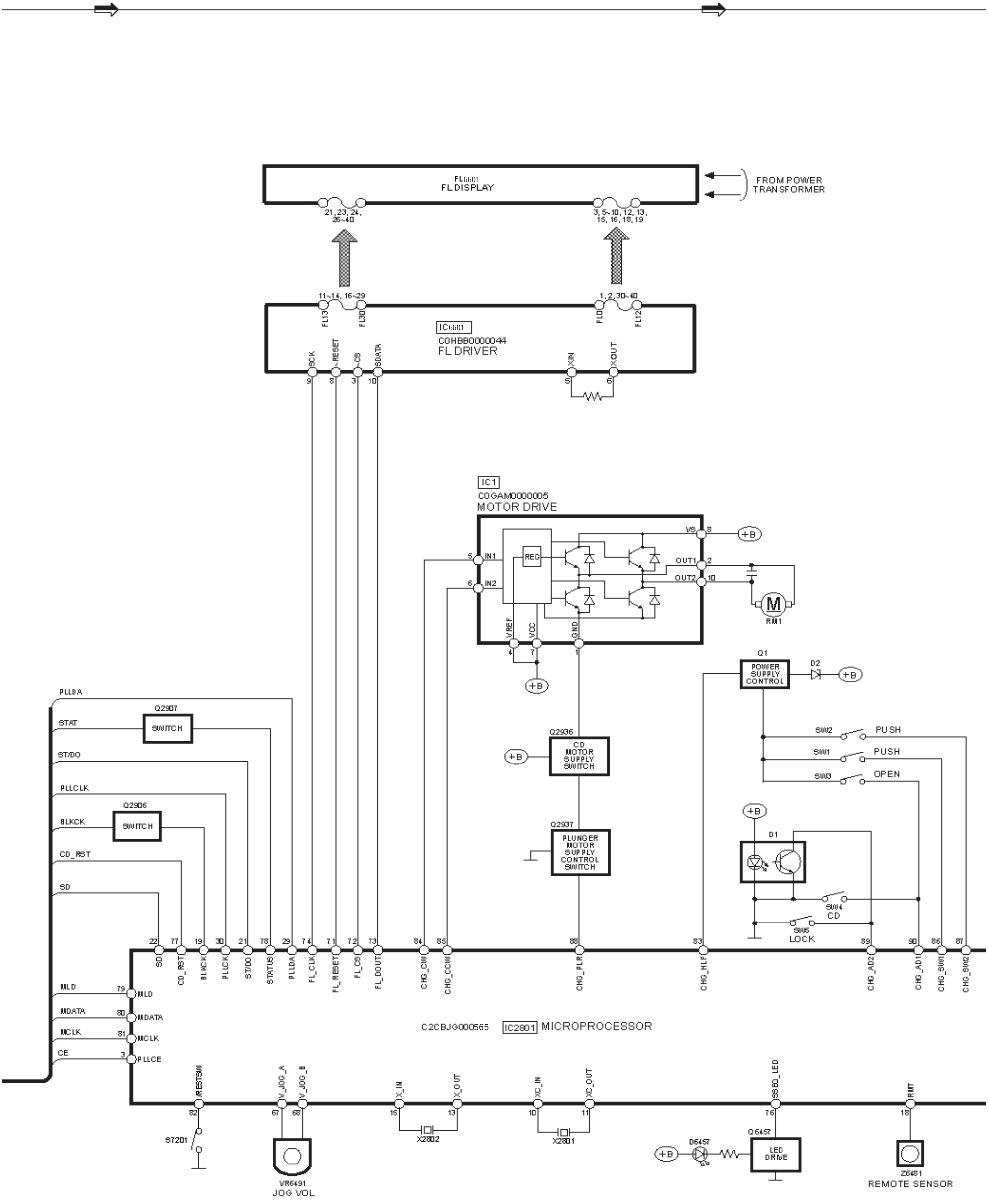




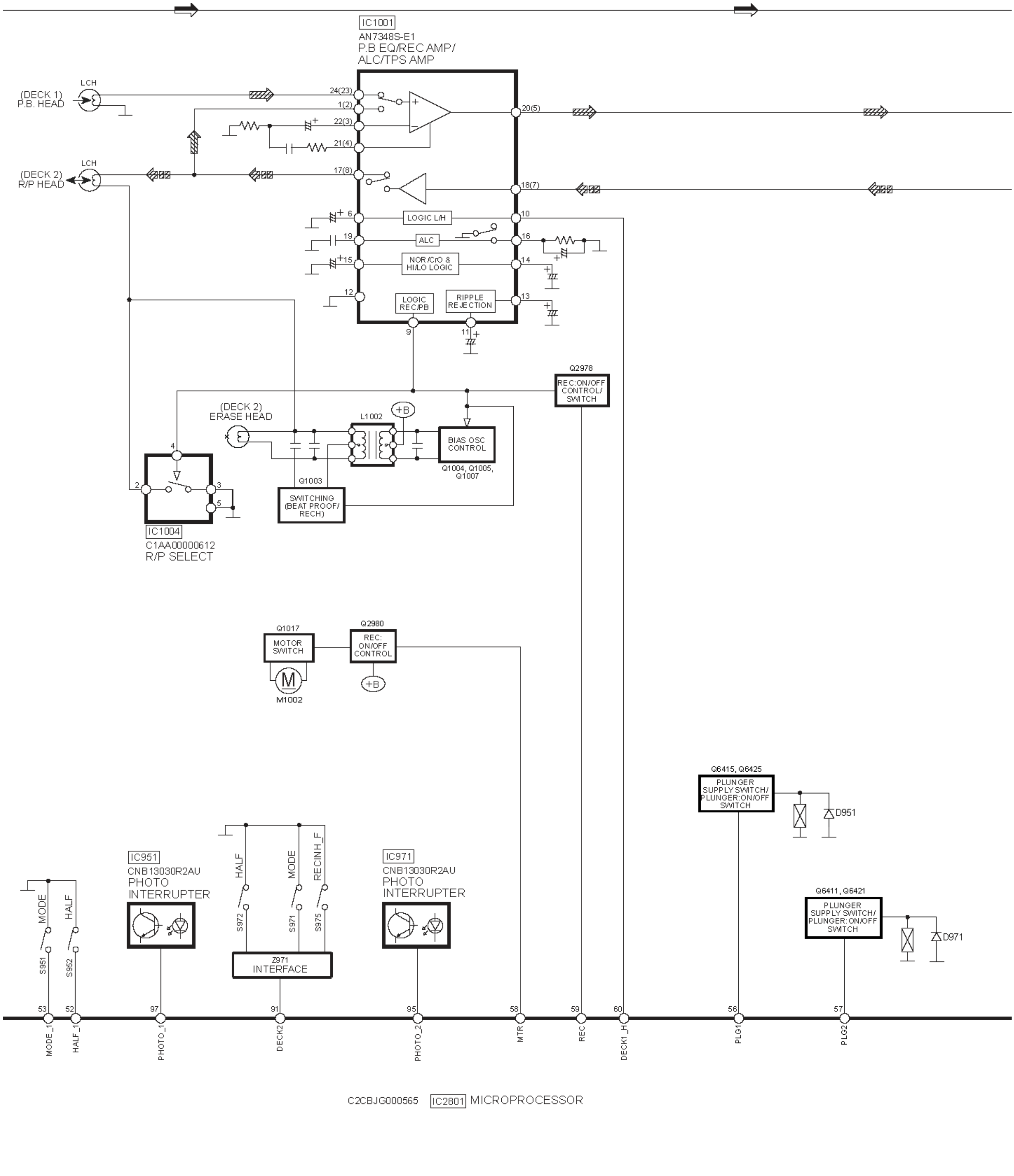
IC7002
MN6627953HB
SERVO PROCESSOR
DIGITAL SIGNAL
PROCESSOR/
DIGITAL FILTER/
D/A CONVERTER



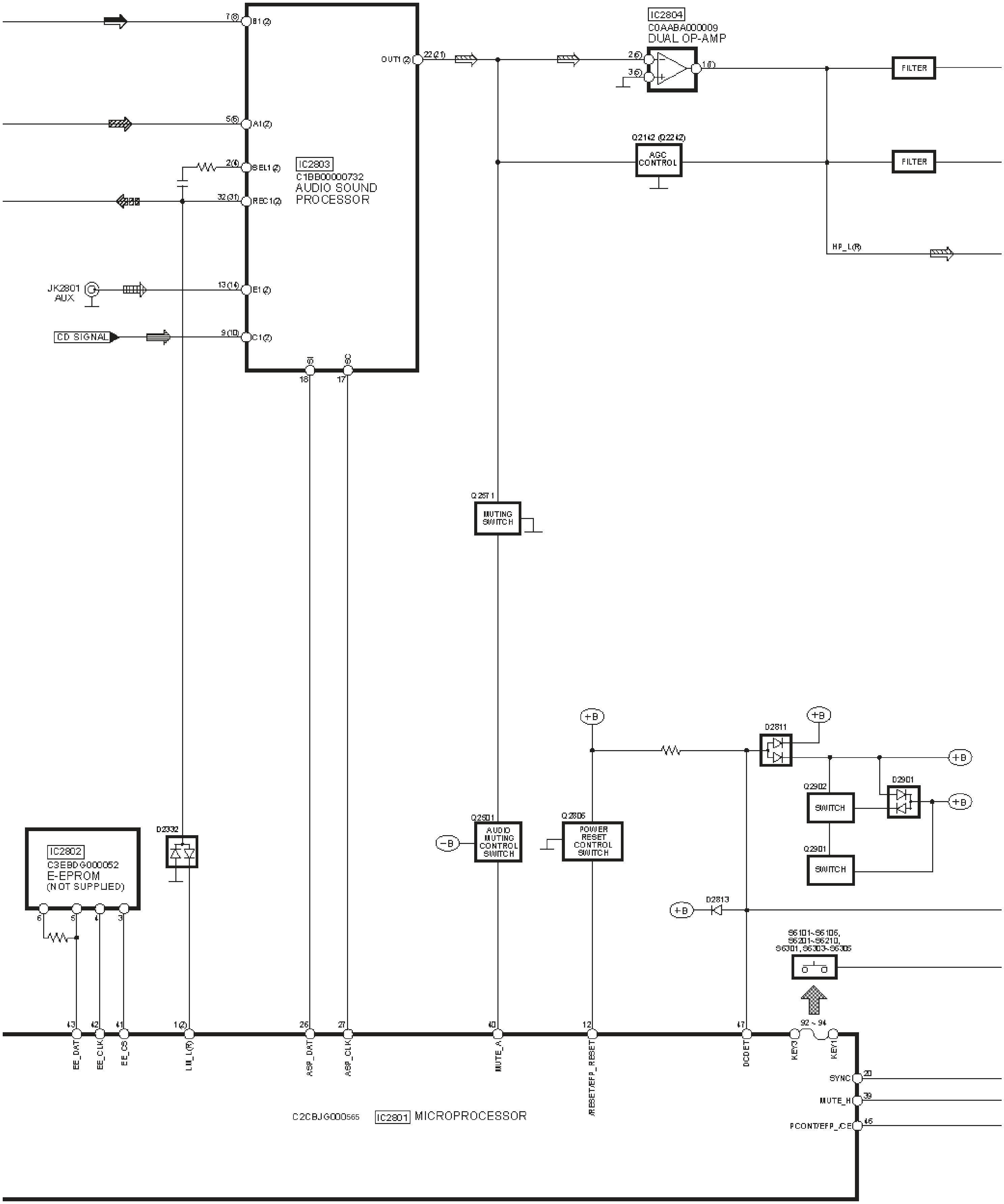
FM ANT
Z2620
Q1 (RF AMP)
Q2
MIXER
Q3
OSC
Q4
BUFFER
(FM)
CF2601
Q2601
FM IF AMP
CF2602
AM ANT
L2601
D2602
L2602
RCH
ALC
AM OSC
AM MIX
AM RM AMP
BUFFER
AGC
PHASE DET
PILOT CANCEL
DECODER
STEREO SWITCH
LEVEL DET
S-CURVE
FM IF
FM DET
AM/FM IF BUFFER
AM IF
AM DET
COMP
TUNING DRIVE
VCO
FF
PILOT DET
REG
SD
ST
X2602
IC2601
LA1833NMNTLM
FM/AM IF AMP, DET/AM OSC, MIX/FM MPX
Z2602
AM IFT
ST/DO
SD
PHASE DETECTOR CHARGE PUMP
REFERENCE DIVIDER
X2603
UNLOCK DETECTOR
SWALLOW COUNTER 1/6,1/17,4 BITS
12 BITS PROGRAMMABLE DIVIDER
UNIVERSAL COUNTER
SHIFT REGISTER LATCH
C2B I/F
POWER ON RESET
DO
CE
DI
CL
ST/DO
CE
PLLDA
PLLCLK
Q2606
TUNER 15V SUPPLY SWITCH
(FM)
IC2602
LC72131MDTRM
PLL FREQUENCY SYNTHESIZER
TO CD DRIVE BLOCK

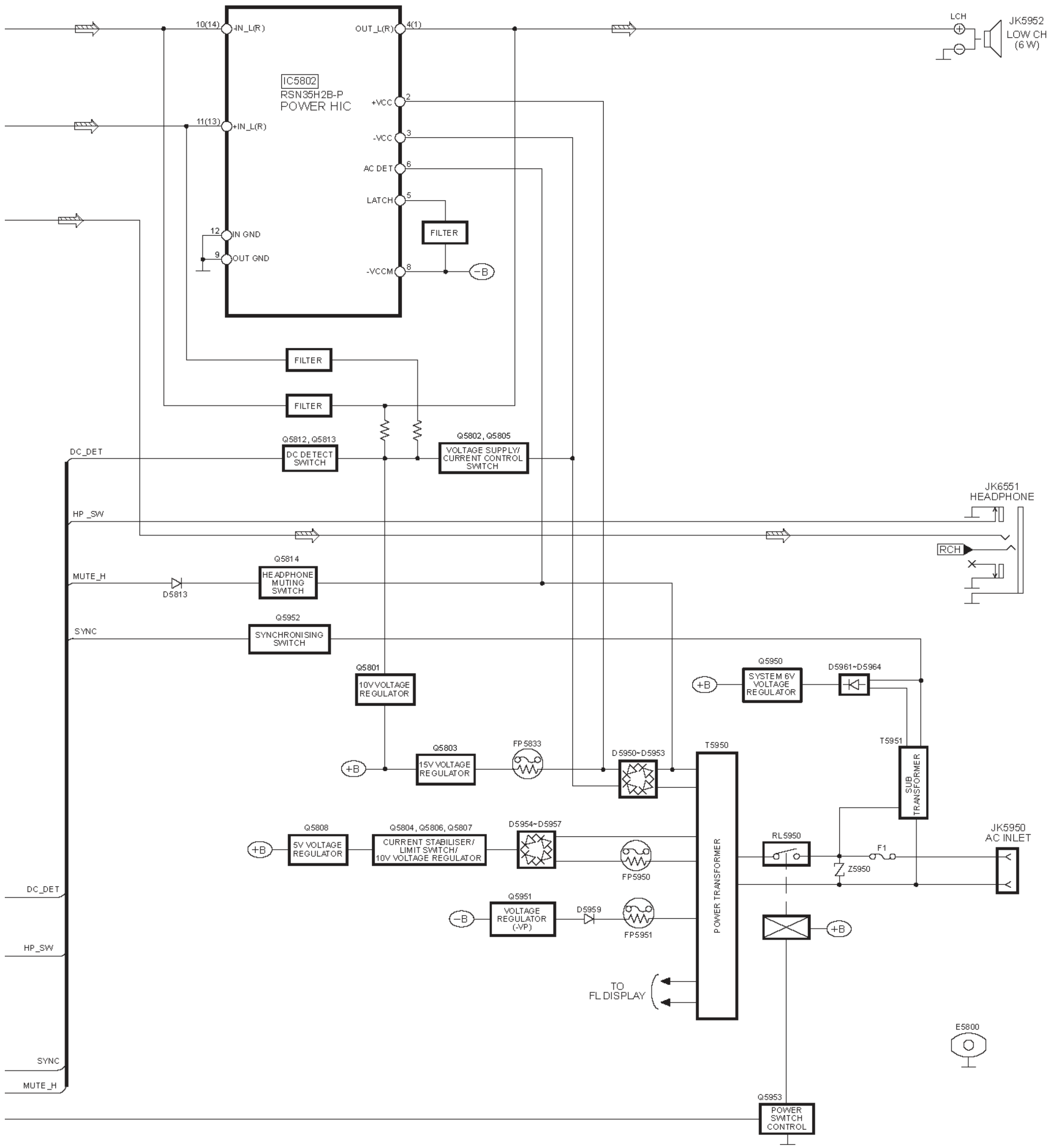


FL6601
FL DISPLAY
FROM POWER TRANSFORMER
IC6601
C0HBB0000044
FL DRIVER
IC1
C0GAM0000005
MOTOR DRIVE
RM1
Q1
POWER SUPPLY CONTROL
D2
Q2936
CD MOTOR SUPPLY SWITCH
Q2937
PLUNGER MOTOR SUPPLY CONTROL SWITCH
SW2 PUSH
SW1 PUSH
SW3 OPEN
D1
SW4 CD
SW5 LOCK
Q2907 SWITCH
Q2906 SWITCH
PLLDA
STAT
ST/DO
PLLCLK
BLKCK
CD_RST
SD
MLD
MDATA
MCLK
CE
C2CBJG000565
IC2801 MICROPROCESSOR
S7201
VR6491
JOG VOL
X2802
X2801
D6457
Q6457
LED DRIVE
Z6481
REMOTE SENSOR



IC1001
AN7348S-E1
P.B EQ/REC AMP/
ALC/TPS AMP
LCH
(DECK 1)
P.B. HEAD
(DECK 2)
R/P HEAD
LOGIC L/H
ALC
NOR/CrO &
HI/LO LOGIC
LOGIC
REC/PB
RIPPLE
REJECTION
Q2978
REC:ON/OFF
CONTROL/
SWITCH
(DECK 2)
ERASE HEAD
L1002
+B
BIAS OSC
CONTROL
Q1004, Q1005,
Q1007
Q1003
SWITCHING
(BEAT PROOF/
RECH)
IC1004
C1AA00000612
R/P SELECT
Q1017
MOTOR
SWITCH
M1002
Q2980
REC:
ON/OFF
CONTROL
Q6415, Q6425
PLUNGER
SUPPLY SWITCH/
PLUNGER:ON/OFF
SWITCH
D951
Q6411, Q6421
PLUNGER
SUPPLY SWITCH/
PLUNGER:ON/OFF
SWITCH
D971
IC951
CNB13030R2AU
PHOTO
INTERRUPTER
IC971
CNB13030R2AU
PHOTO
INTERRUPTER
MODE
HALF
S951
S952
HALF
MODE
RECINH_F
S972
S971
S975
Z971
INTERFACE
MODE_1
HALF_1
PHOTO_1
DECK2
PHOTO_2
MTR
REC
DECK1_H
PLG1
PLG2
C2CBJG000565
IC2801
MICROPROCESSOR


IC2804
C0AABA000009
DUAL OP-AMP
FILTER
FILTER
Q2142 (Q2242)
AGC CONTROL
HP_L(R)
IC2803
C1BB00000732
AUDIO SOUND PROCESSOR
OUT1
B1
A1
SEL1
REC1
E1
C1
JK2801
AUX
CD SIGNAL
Q2571
MUTING SWITCH
D2811
D2901
Q2902
SWITCH
Q2901
SWITCH
D2813
Q2501
AUDIO MUTING CONTROL SWITCH
Q2806
POWER RESET CONTROL SWITCH
S6101~S6106, S6201~S6210, S6301, S6303~S6305
IC2802
C3EBDG000052
E-EPROM
(NOT SUPPLIED)
D2332
EE_DAT
EE_CLK
EE_CS
LM_L(R)
ASP_DAT
ASP_CLK
MUTE_A
/RESET/EFP_RESET
DCDET
KEY3
KEY1
SYNC
MUTE_H
PCONT/EFP_/CE
C2CBJG000565
IC2801
MICROPROCESSOR



SIGNAL LINES

: MAIN SIGNAL LINE
: CD SIGNAL LINE
: AM SIGNAL LINE
: PLAYBACK SIGNAL LINE
: FM OSC SIGNAL LINE
: AM OSC SIGNAL LINE
: FM/AM SIGNAL LINE
: RECORD SIGNAL LINE
: FM SIGNAL LINE
: AUX SIGNAL LINE
: CD-DA (AUDIO/VIDEO) SIGNAL LINE

( ) Indicates the Pin No. of Right Channel.

NOTE : Signal Lines are applicable to the Left Channel only.

Main P.C.B.

Ref No.	IC2601																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	1.98	5.95	1.99	1.98	0	4.90	5.17	3.82	5.95	0	4.87	3.52	1.604	1.6	1.93	1.99	1.984	2.21	0	0.125
PLAY	1.98	5.95	1.99	1.97	0	4.74	5.15	3.82	5.95	0	4.86	3.52	1.59	1.595	1.93	1.989	1.981	2.20	0	0.125
STOP	1.99	5.96	1.99	1.98	0	4.92	5.17	3.83	5.95	0	4.87	3.52	1.59	1.6	1.93	1.99	1.981	2.20	0	0.125

Ref No.	IC2601																			
MODE	21	22	23	24																
REC	2.357	2.357	5.95	4.57																
PLAY	2.35	2.35	5.95	4.56																
STOP	2.35	2.35	5.95	4.57																

Ref No.	IC2602																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	2.59	0	0	0	5.18	4.95	0	4.63	0	14.94	0	0	2.59	0	5.19	0	0	14.94	0	2.59
PLAY	2.57	0	0	0	5.16	4.86	0	4.55	0	15.18	0	0	2.59	5.19	5.19	0	0	15.23	0	2.58
STOP	2.57	0	0	0	5.16	4.86	0	4.55	0	15.18	0	0	2.59	5.19	5.19	0	0	15.23	0	2.58

Ref No.	IC2801																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	0	0	0	0	0	0	0	0	0	0.669	0.69	5.25	2.68	0	2.6	0	0	5.25	3.1	5.20
PLAY	0	0	0	0	0	0	0	0	0	0.67	0.68	5.25	2.68	0	2.6	0	0	5.224	3.1	5.20
STOP	0	0	0	0	0	0	0	0	0	0.67	0.67	5.25	2.68	0	2.62	0	0	5.224	3.1	5.20

Ref No.	IC2801																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
REC	4.95	0	0	0	0	0	5.28	0	0	0	0	0	0	0	0	0	0	0	0	0
PLAY	4.95	0	0	0	0	0	5.26	0	0	0	0	0	0	0	0	0	0	0	0	0
STOP	4.95	0	0	0	0	0	5.26	0	0	0	0	0	0	0	0	0	0	5.224	0	0

Ref No.	IC2801																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
REC	0	0	0	0	0	5.18	5.16	0	0	0	0	0	4.79	0	0	0	0	0	5.25	0
PLAY	0	0	0	0	0	5.17	5.15	0	0	0	0	0	4.78	0	0	0	0	0	5.25	0
STOP	0	0	0	0	0	5.18	5.15	0	0	0	0	0	4.79	0	0	0	0	0	5.25	0

Ref No.	IC2801																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
REC	0	5.25	0	0	0	0	0	5.25	0	0	0	3.0	0.3	0	0	0	5.25	3.0	0	0.5
PLAY	0	5.25	0	0	0	0	0	5.25	0	0	0	3.0	0.31	0	0	0	5.25	3.0	0	0.5
STOP	0	5.25	0	0	0	0	0	5.25	0	0	0	3.1	0.3	0	0	0	5.25	3.1	0	0.5

Ref No.	IC2801																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
REC	4.91	0	0	5.24	5.25	0	0	0	0	3.65	5.25	1.24	5.25	5.23	4.38	0.59	0	5.25	5.25	5.18
PLAY	4.91	0	0	5.25	5.25	0	0	0	0	3.65	5.22	1.24	5.25	5.23	4.38	0.58	0	5.25	5.26	5.18
STOP	4.92	0	0	5.25	5.25	0	0	0	0	3.65	5.24	1.24	5.25	5.23	4.38	0.59	0	5.25	5.25	5.19

Ref No.	IC2803																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	4.52	4.60	4.52	4.60	4.50	4.49	4.49	4.49	4.50	4.50	4.49	4.49	4.49	4.45	4.54	0	5.17	0	9.03	3.38
PLAY	4.52	4.60	4.50	4.61	4.52	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.54	0	5.20	0	9.02	3.38
STOP	0	5.27	0	0	0	0	0	0												

Ref No.	IC2803																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32								
REC	4.54	4.54	4.54	4.52	4.52	4.51	4.54	4.53	4.54	4.53	4.54	4.55								
PLAY	4.54	4.55	4.55	4.53	4.52	4.51	4.54	4.53	4.54	4.54	4.54	4.55								
STOP	4.54	4.55	4.55	4.53	4.52	4.57	4.54	4.53	4.54	4.54	4.54	4.55								

Main P.C.B.

Ref No.	Q2601				Q2606				Q2936				Q2901				Q2902			
MODE	E/S	C/D	B/G		E/S	C/D	B/G		E/S	C/D	B/G		E/S	C/D	B/G		E/S	C/D	B/G	
REC	0	0	0		14.79	0	14.79		9.92	0	9.94		5.54	3.28	6.5		2.98	5.56	2.4	
PLAY	0	0	0		15.17	0	15.20		9.95	0	9.95		5.60	3.29	6.24		3.02	5.58	2.48	
STOP	0	0	0		15.26	0	15.22		9.99	0	9.99		7.08	3.3	7.65		3.04	7.08	2.5	

Transformer P.C.B.

Ref No.	Q5950				Q5951				Q5952				Q5953							
MODE	E/S	C/D	B/G		E/S	C/D	B/G		E/S	C/D	B/G		E/S	C/D	B/G					
REC	5.98	10.12	6.60		-25.86	-29.20	-26.50		-8.92	-8.84	-8.18		0	0.13	0.8					
PLAY	5.99	10.30	6.59		-25.85	-29.22	-26.50		-8.92	-8.81	-8.17		0	0.13	0.8					
STOP	5.99	10.25	6.59		-25.85	-29.22	-26.50		-8.96	4.78	-8.95		0	0.13	0.8					

17 Schematic Diagram

(All schematic diagrams may be modified at any time with the development of the new technology)

Note:

- **SW1** : Push switch
- **SW2** : Push switch
- **SW3** : Open switch
- **SW4** : CD switch
- **SW5** : Load switch
- **S951** : Mode switch
- **S952** : Half switch
- **S971** : Mode switch
- **S972** : Half switch
- **S975** : Recinh_F switch
- **S6101** : Open/ Close switch
- **S6102** : CD 1 switch
- **S6103** : CD 2 switch
- **S6104** : CD 3 switch
- **S6105** : CD 4 switch
- **S6106** : CD 5 switch
- **S6201** : Rew switch
- **S6202** : Tuner switch
- **S6203** : CD switch
- **S6204** : FF switch
- **S6205** : Stop switch
- **S6206** : Deck 1/2 switch
- **S6207** : Deck 2 Open switch
- **S6208** : TAPE switch
- **S6209** : AUX switch
- **S6210** : Deck 1 Open switch
- **S6301** : Power switch
- **S6303** : SSEQ switch
- **S6304** : REC switch
- **S6305** : Demo/Display switch
- **S7201** : Rest switch
- **VR6491** : VR Volume Jog

· The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis. Accordingly, there may arise some error in voltage values and waveformsdependingupon the internal impedance of the tester or the measuring unit.

No mark: Playback << >> : Rec < > : FM (( )) : CD

· **Importance safety notice :**

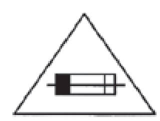
Components identified by mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. Whenreplacing any of components, be sure to use only manufacturer´s specified parts shown in the parts list.

Caution !

IC, LSI and VLSI are sensitive to static electricity. Secondary trouble can be prevented by taking care during repair.

- Cover the parts boxes made of plastics with aluminium foil.
- Put a conductive mat on the work table.
- Ground the soldering iron.
- Do not touch the pins of IC, LSI or VLSI with fingers directly.

CAUTION : FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE **F1, 4A, 125V FUSE.**



RISK OF FIRE-REPLACE FUSE AS MARKED.

FUSE CAUTION



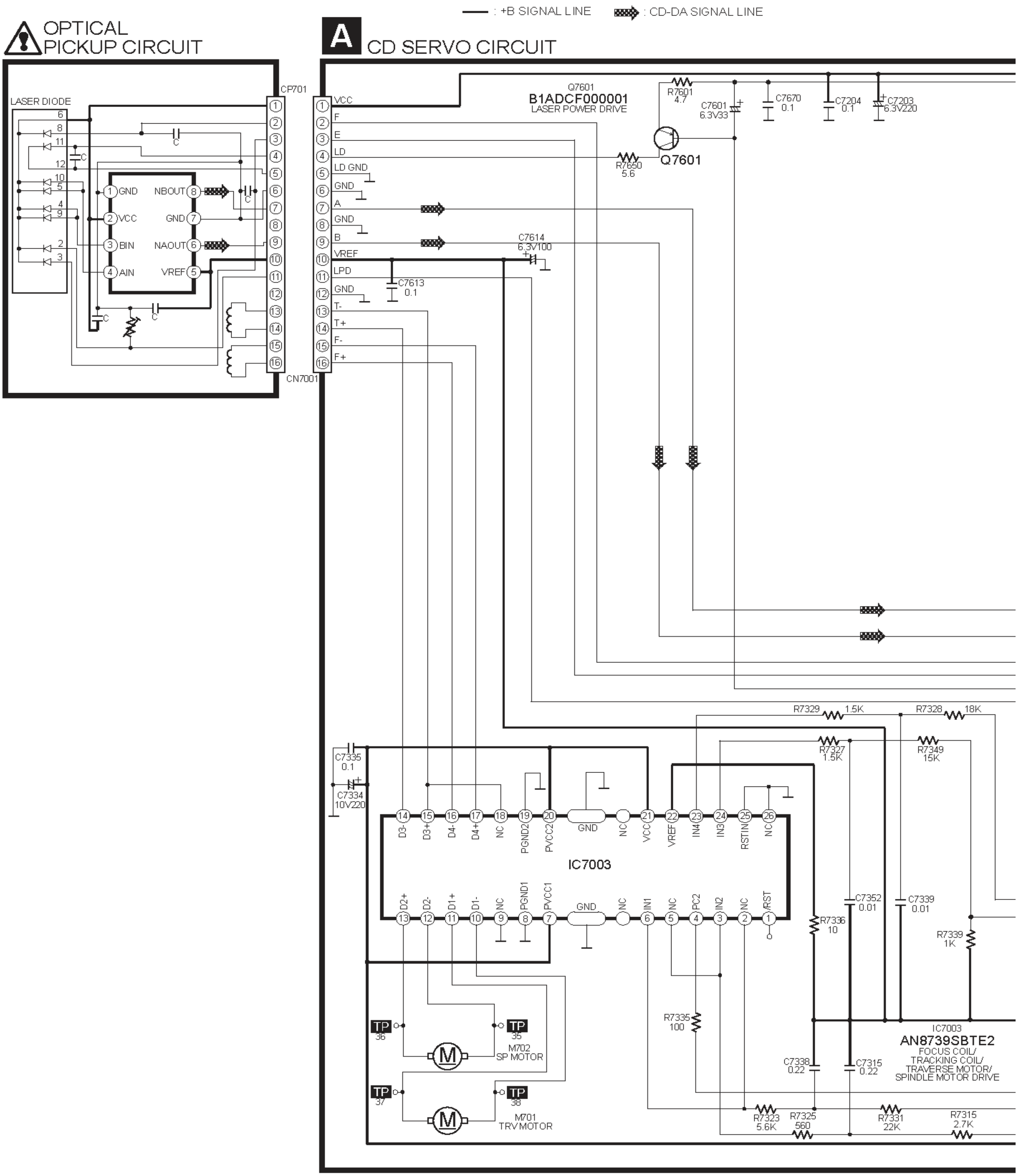
These symbols located near the fuse indicates that the fuse used is a fast operating type. For continued protection against fire harzard, replace with the same type fuse. For fuse rating, refer to the marking adjacent to the symbol.



Ce symbole indique que le fusible utilisé est à rapide. Pour une protection permanente, n' utiliser que des fusibles de même type. Ce dernier est indiqué là qù le présent symbole est apposé.

17.1 (A) CD Servo Circuit

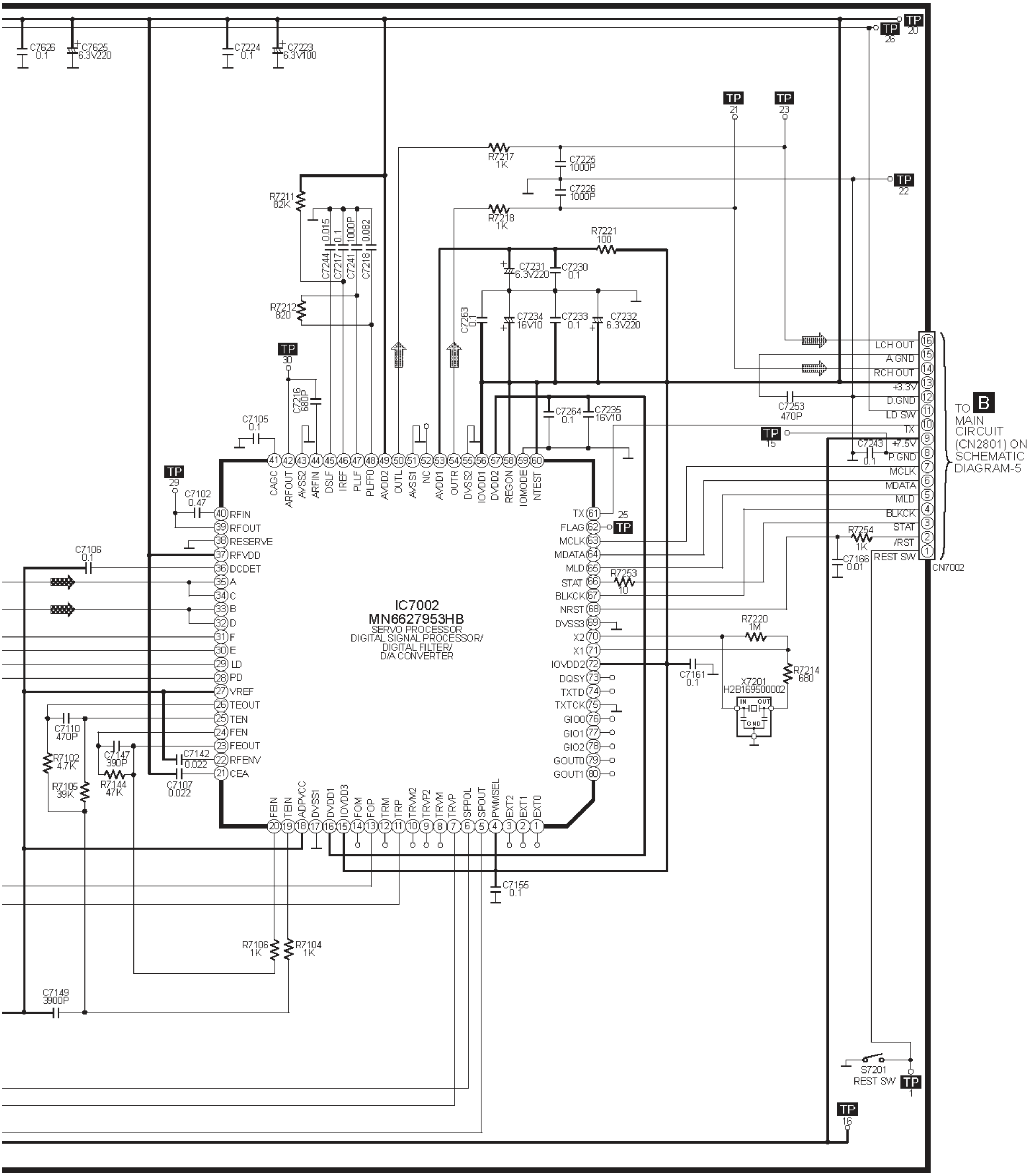
SCHEMATIC DIAGRAM - 1



SCHEMATIC DIAGRAM - 2

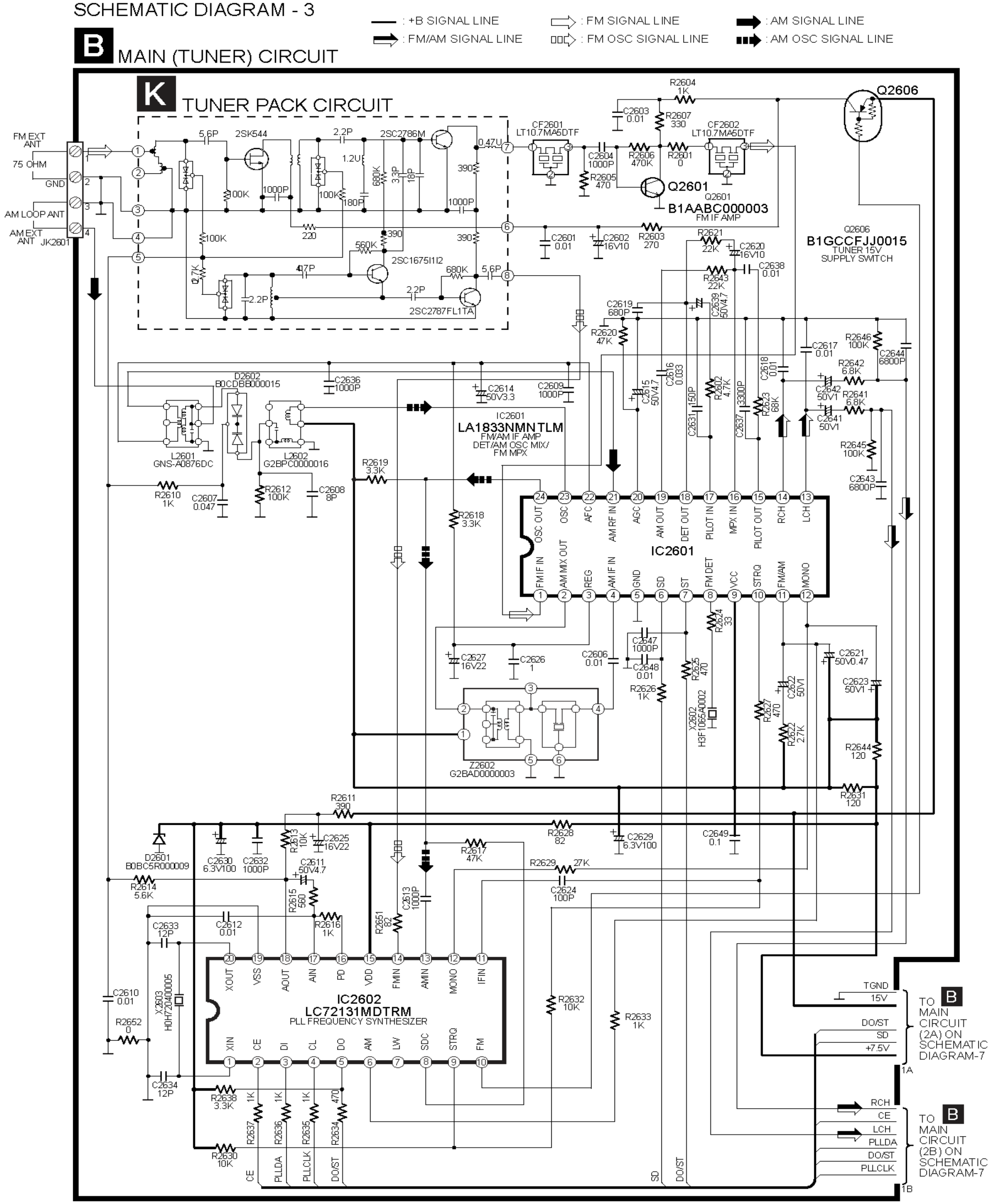
: +B SIGNAL LINE : CD-DA SIGNAL LINE : CD SIGNAL LINE

A CD SERVO CIRCUIT



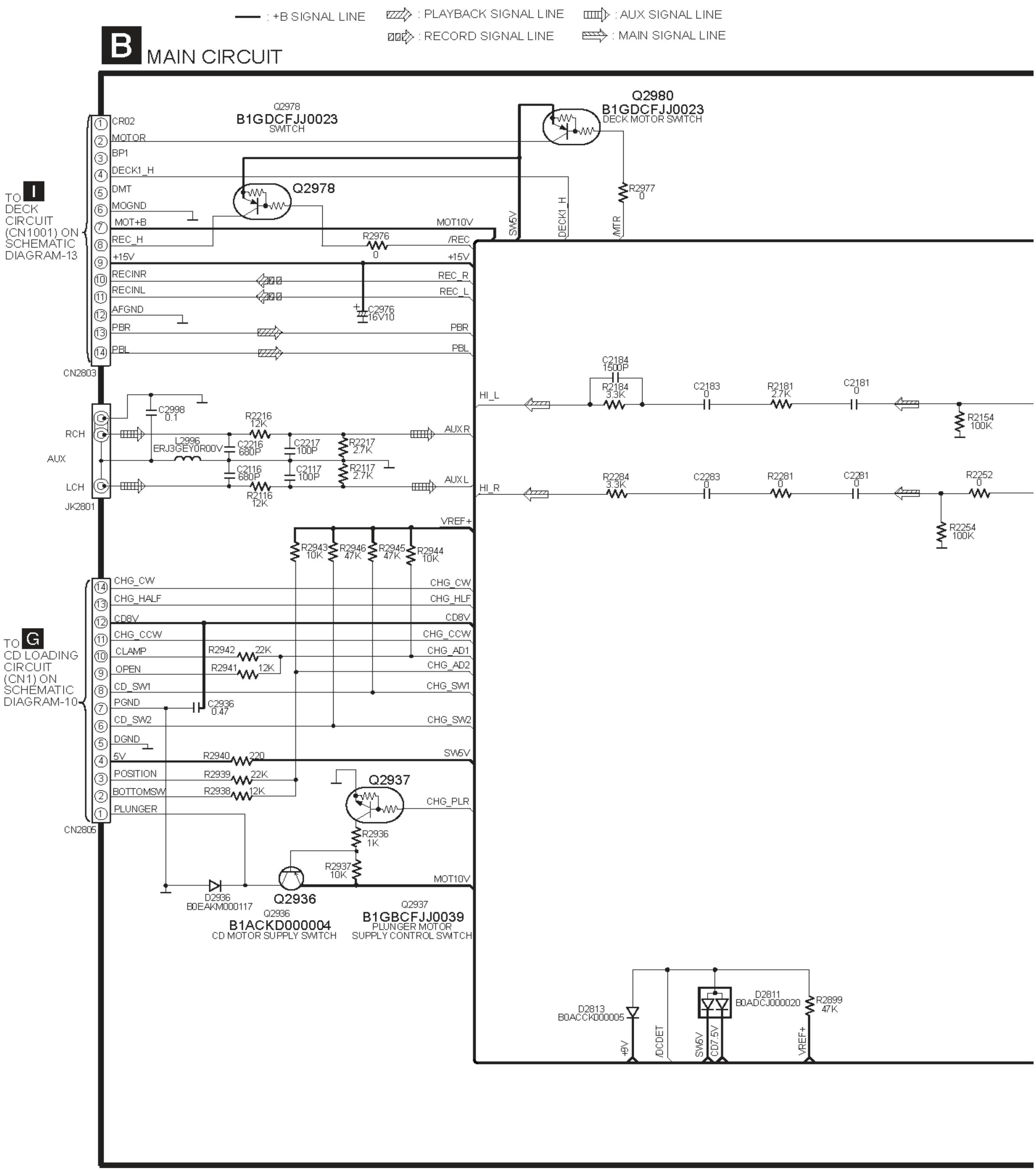
17.2 (B) Main (Tuner) Circuit

SCHEMATIC DIAGRAM - 3



17.3 (B) Main Circuit

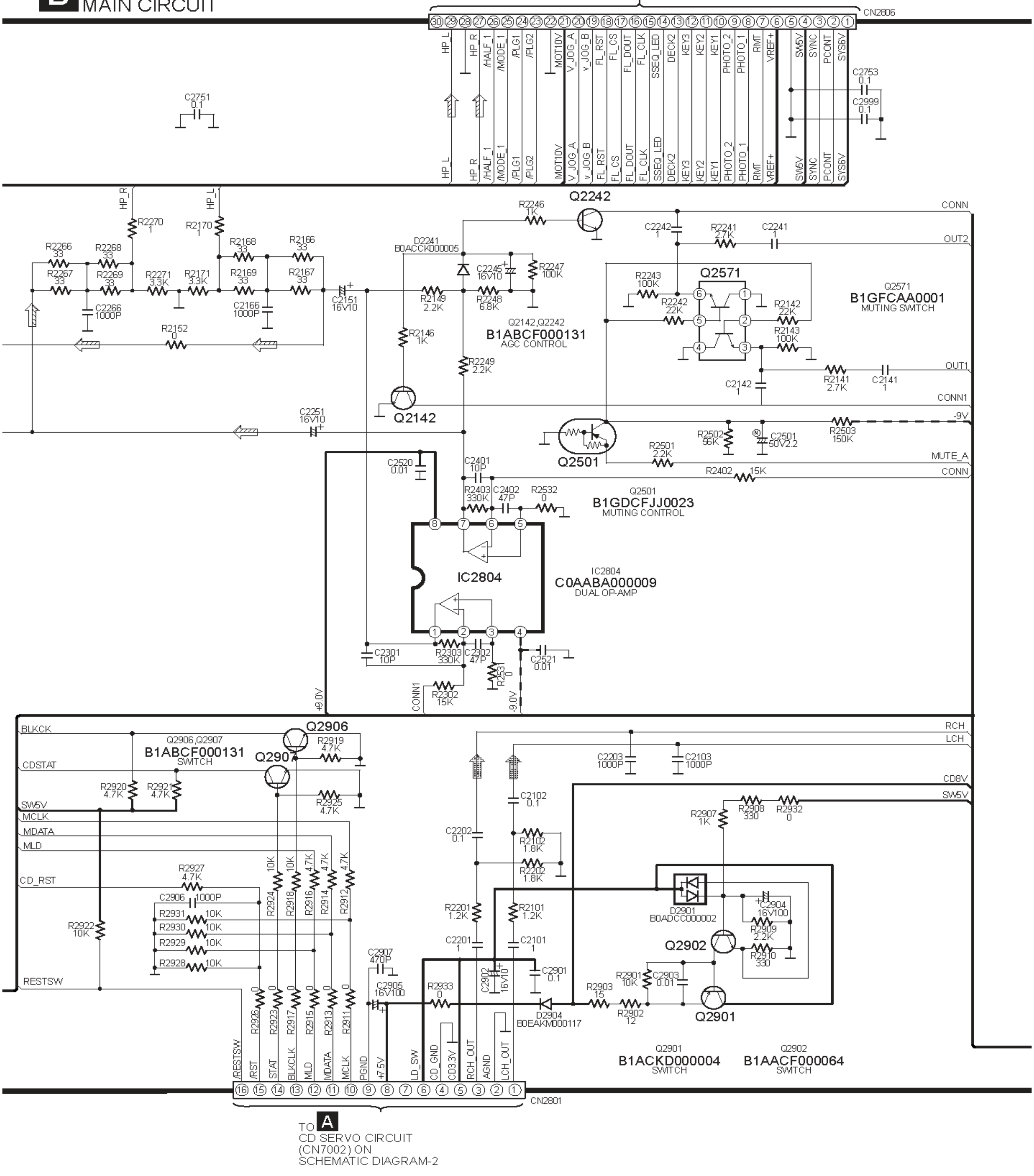
SCHEMATIC DIAGRAM - 4



SCHEMATIC DIAGRAM - 5

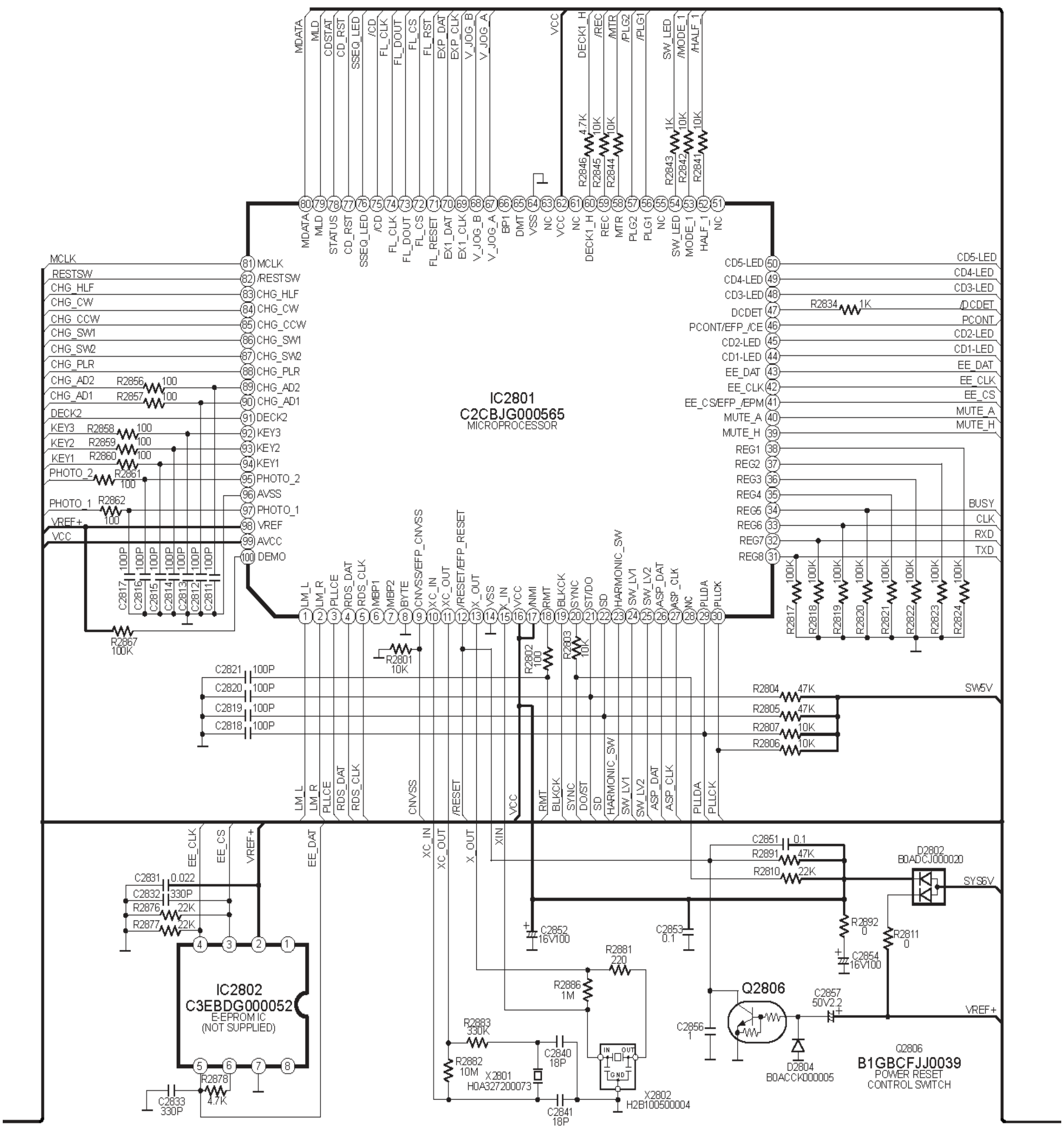
— : +B SIGNAL LINE
- - : -B SIGNAL LINE
: CD SIGNAL LINE
: MAIN SIGNAL LINE

B MAIN CIRCUIT



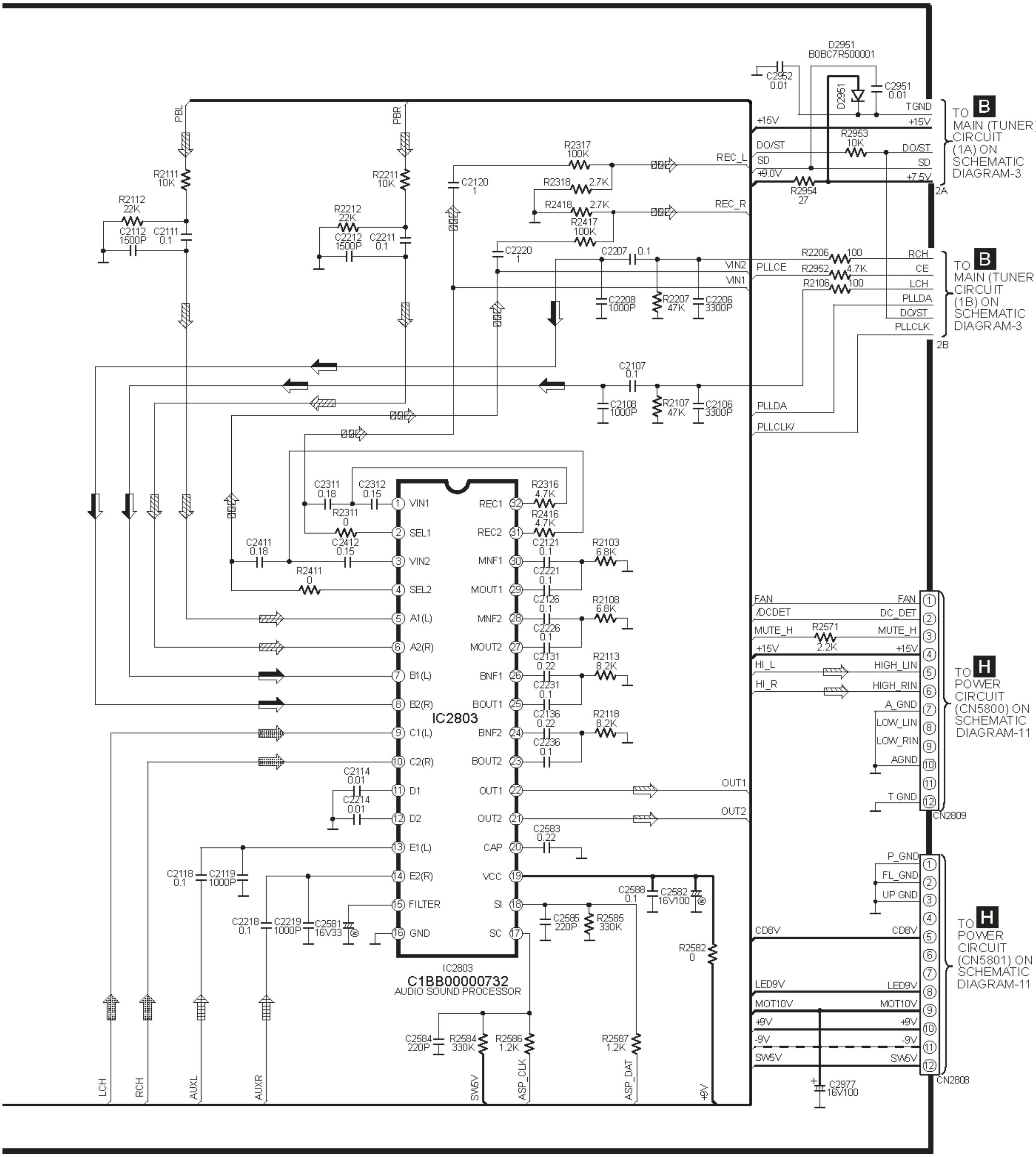
B MAIN CIRCUIT

━ : +B SIGNAL LINE



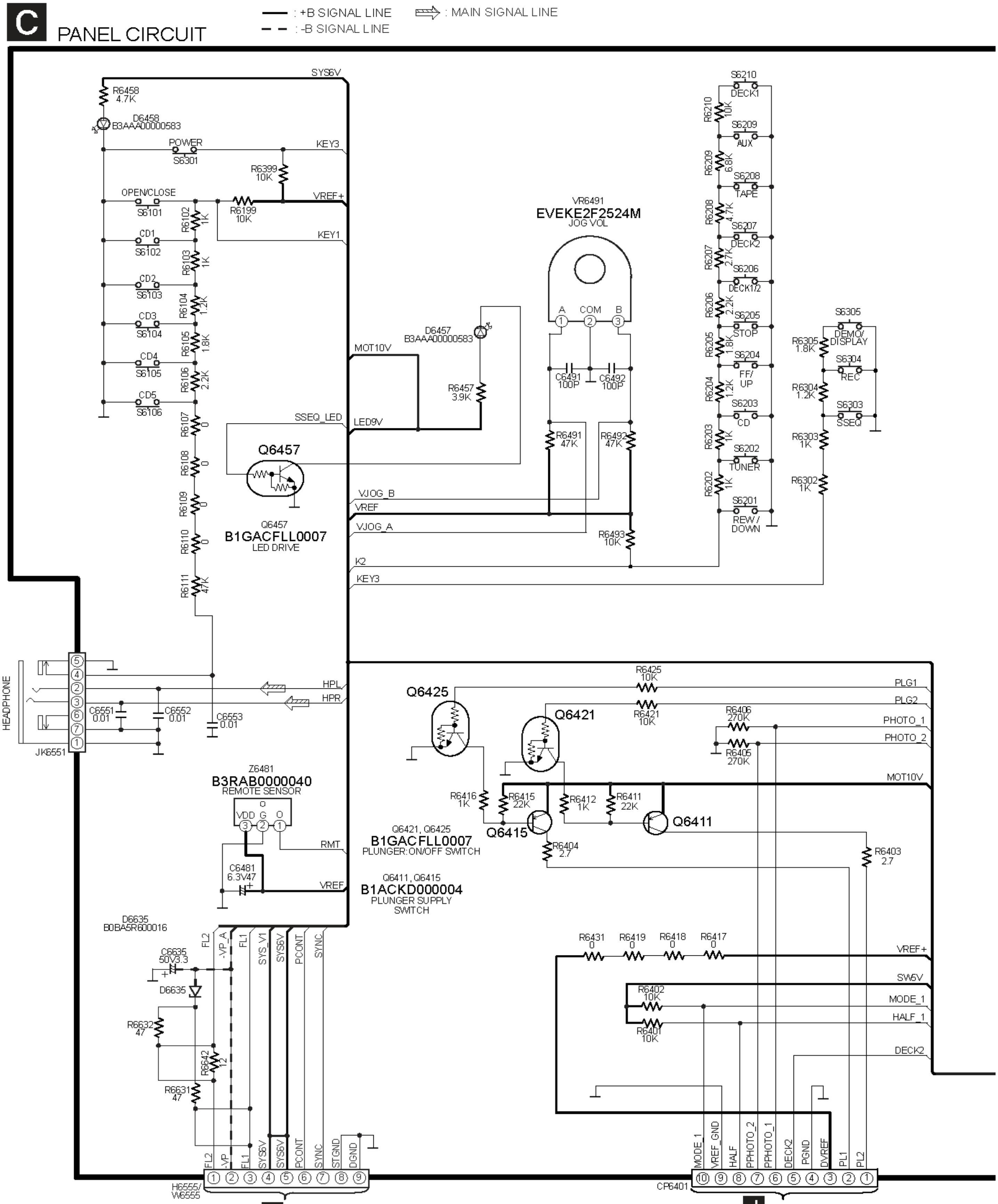
: +B SIGNAL LINE
: -B SIGNAL LINE
: AUX SIGNAL LINE
: CD SIGNAL LINE
: FM/AM SIGNAL LINE
: MAIN SIGNAL LINE
: PLAYBACK SIGNAL LINE
: RECORD SIGNAL LINE

B MAIN CIRCUIT



17.4 (C) Panel Circuit

SCHEMATIC DIAGRAM - 8



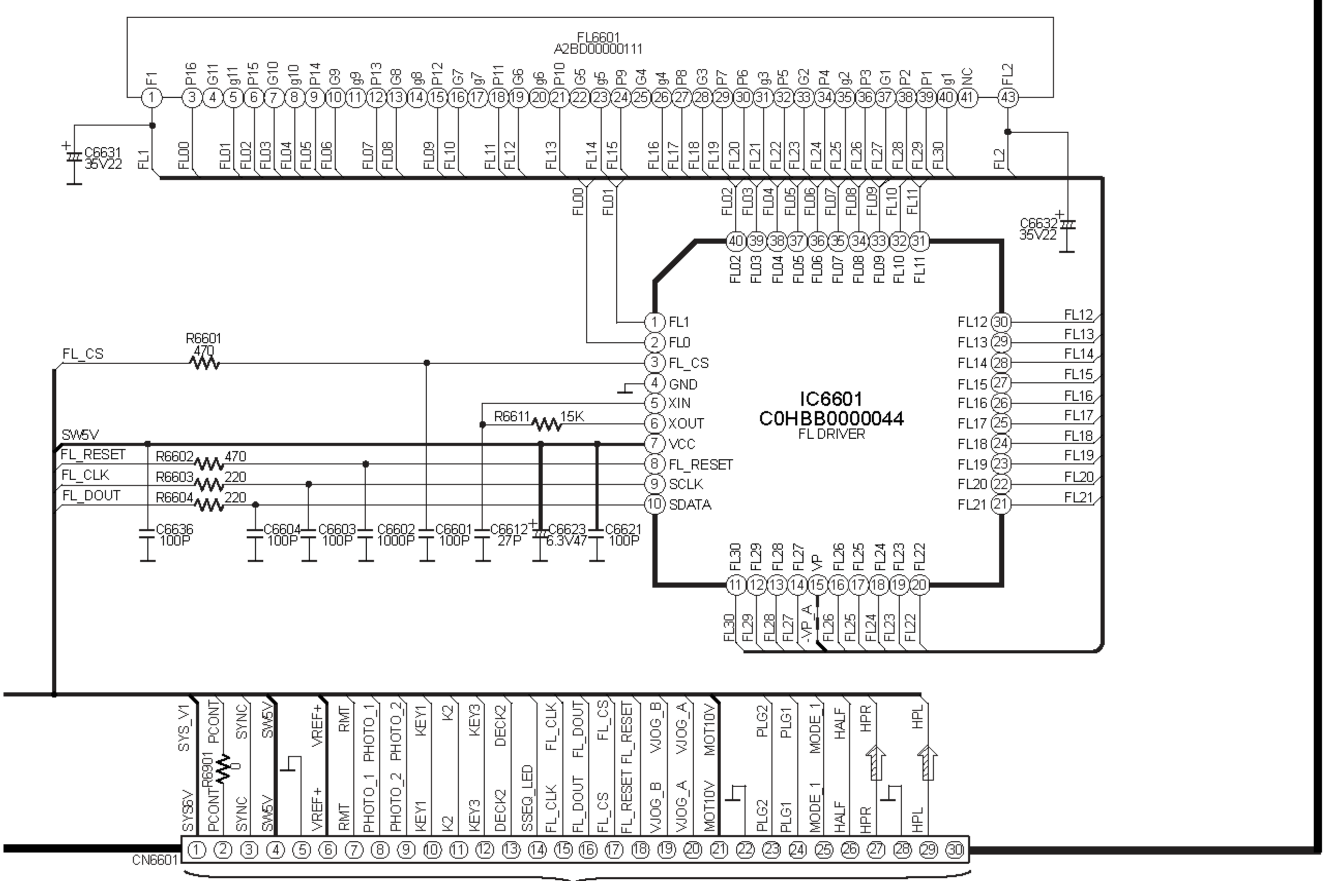
TO D TRANSFORMER CIRCUIT (CN5951) ON SCHEMATIC DIAGRAM-10

TO J DECK MECHANISM CIRCUIT (CN971) ON SCHEMATIC DIAGRAM-13

SCHEMATIC DIAGRAM - 9

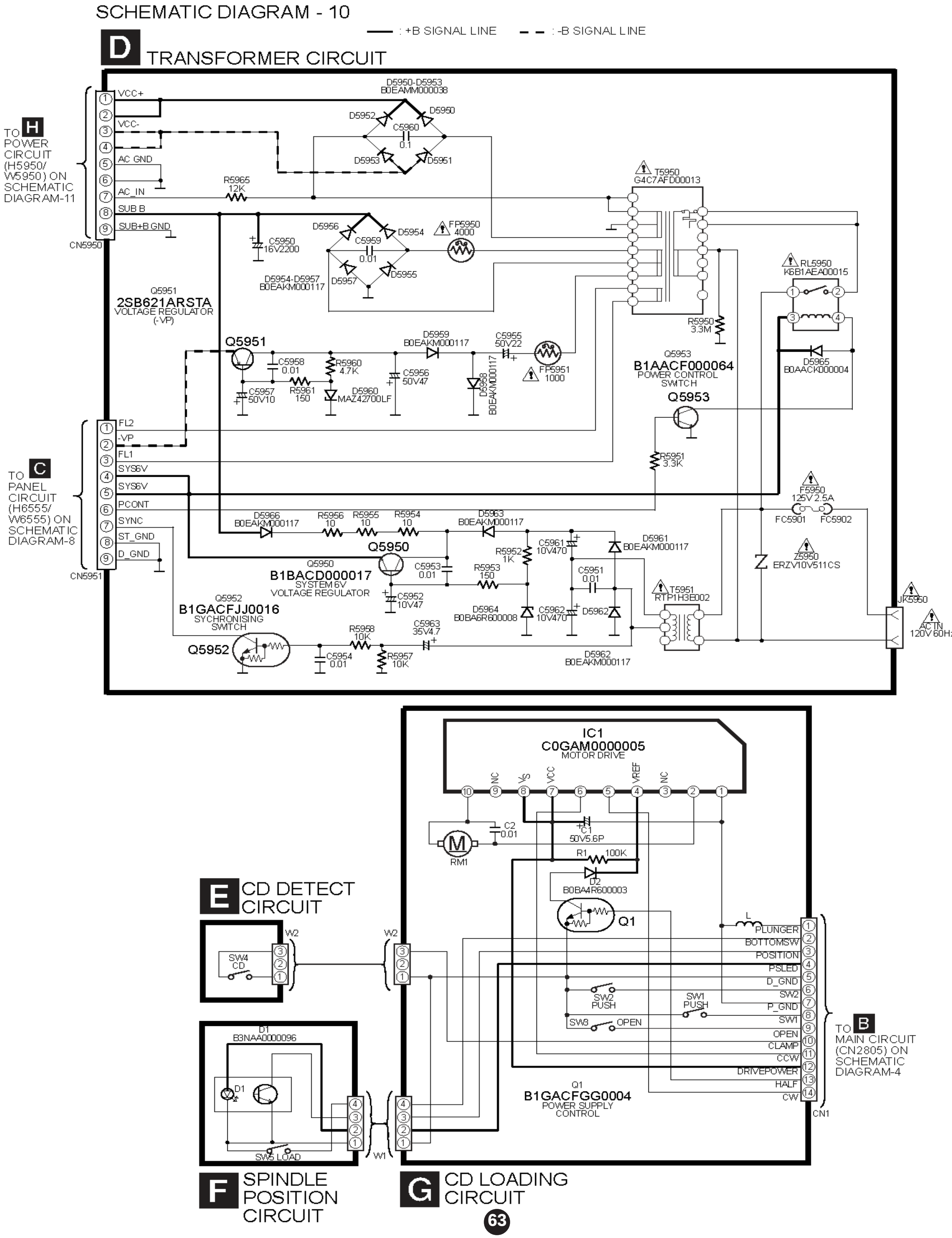
C PANEL CIRCUIT

: +B SIGNAL LINE   : -B SIGNAL LINE   : MAIN SIGNAL LINE



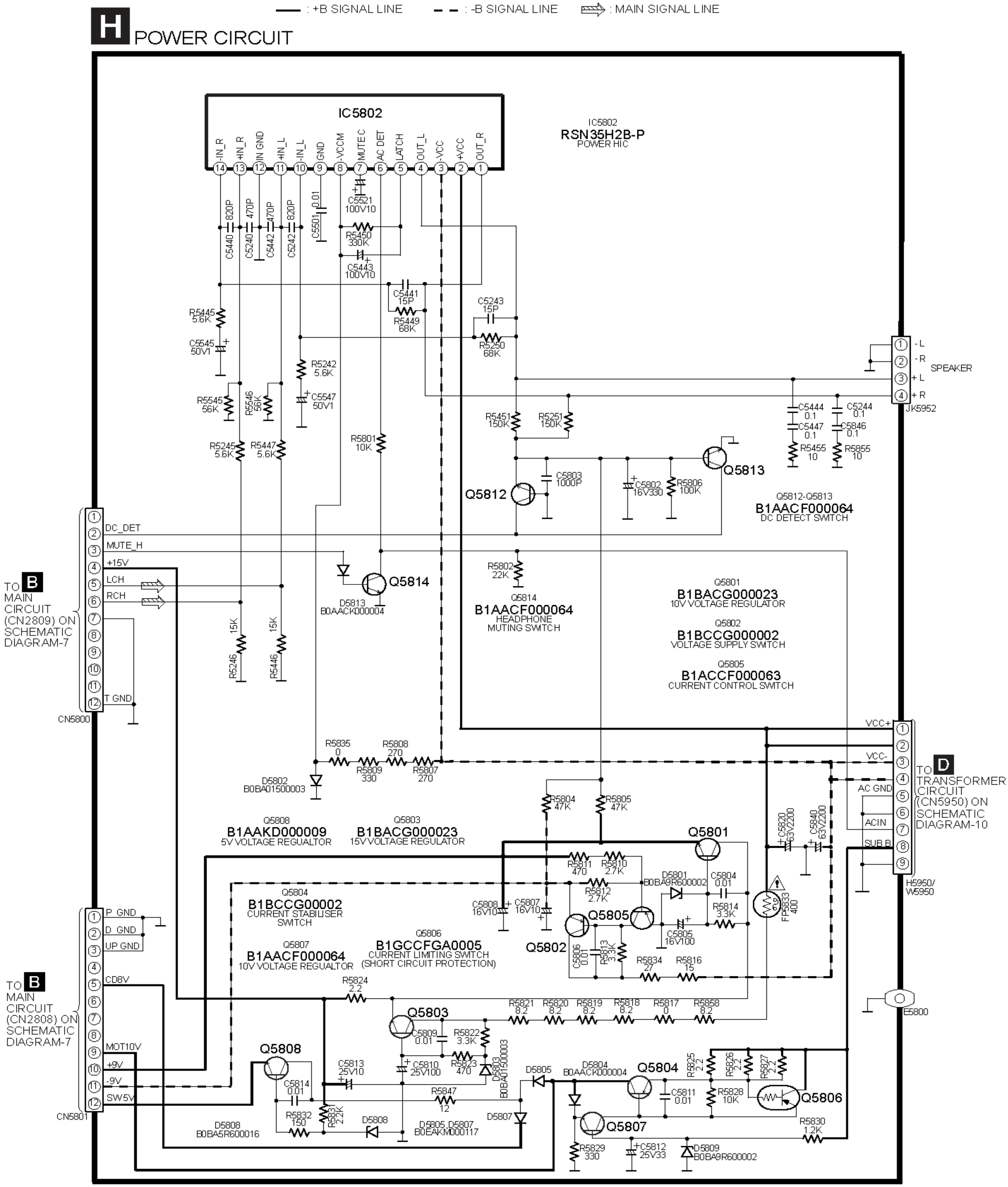
TO **B** MAIN CIRCUIT (CN2806) ON SCHEMATIC DIAGRAM-5

17.5 (D) Transformer Circuit, (E) CD Detect Circuit, (F) Spindle Position Circuit& (G) CD Loading Circuit



17.6 (H) Power Circuit

SCHEMATIC DIAGRAM - 11



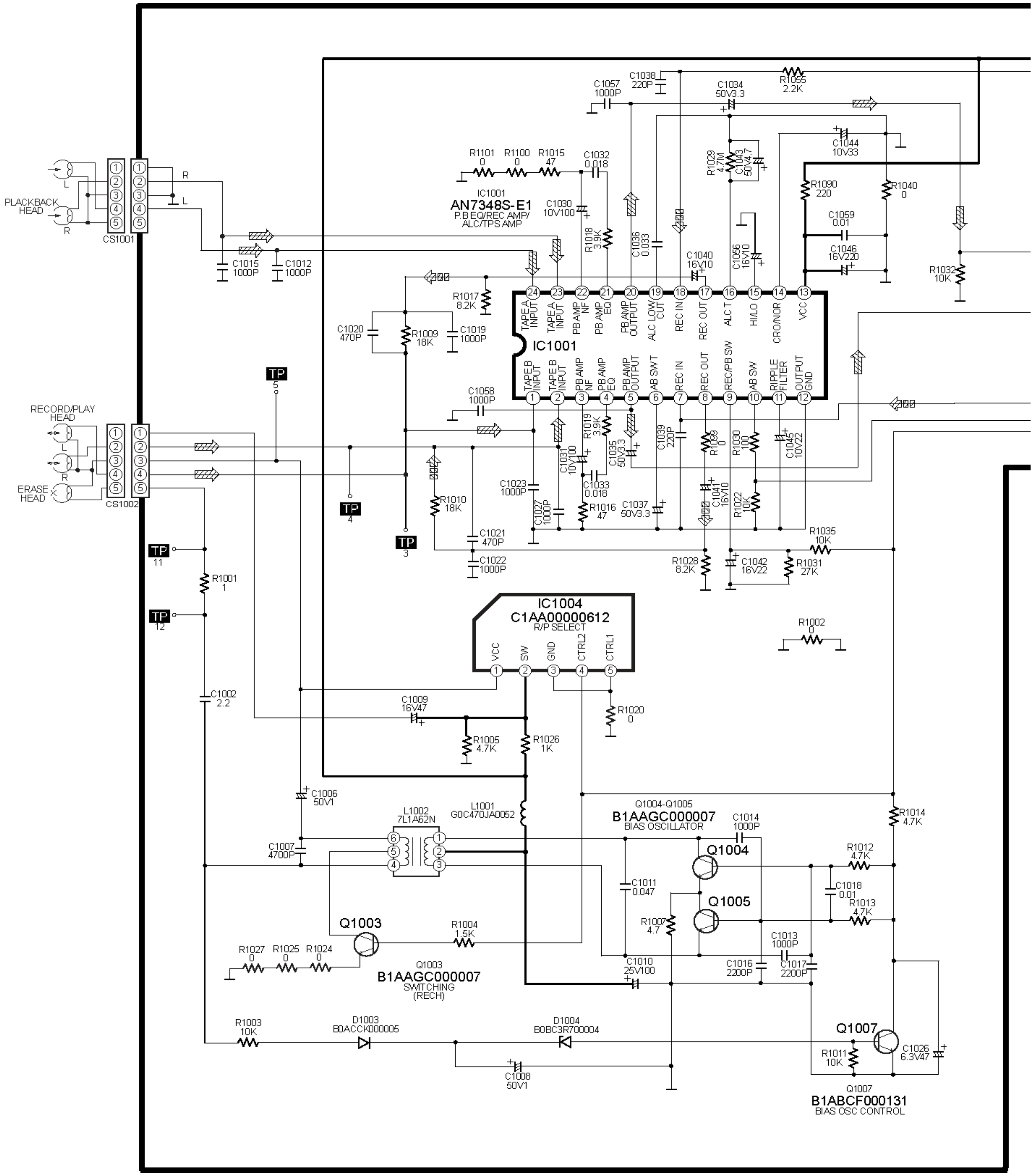
SCHEMATIC DIAGRAM -12

—— : +B SIGNAL LINE

: PLAYBACK SIGNAL LINE

: RECORD SIGNAL LINE

I DECK CIRCUIT



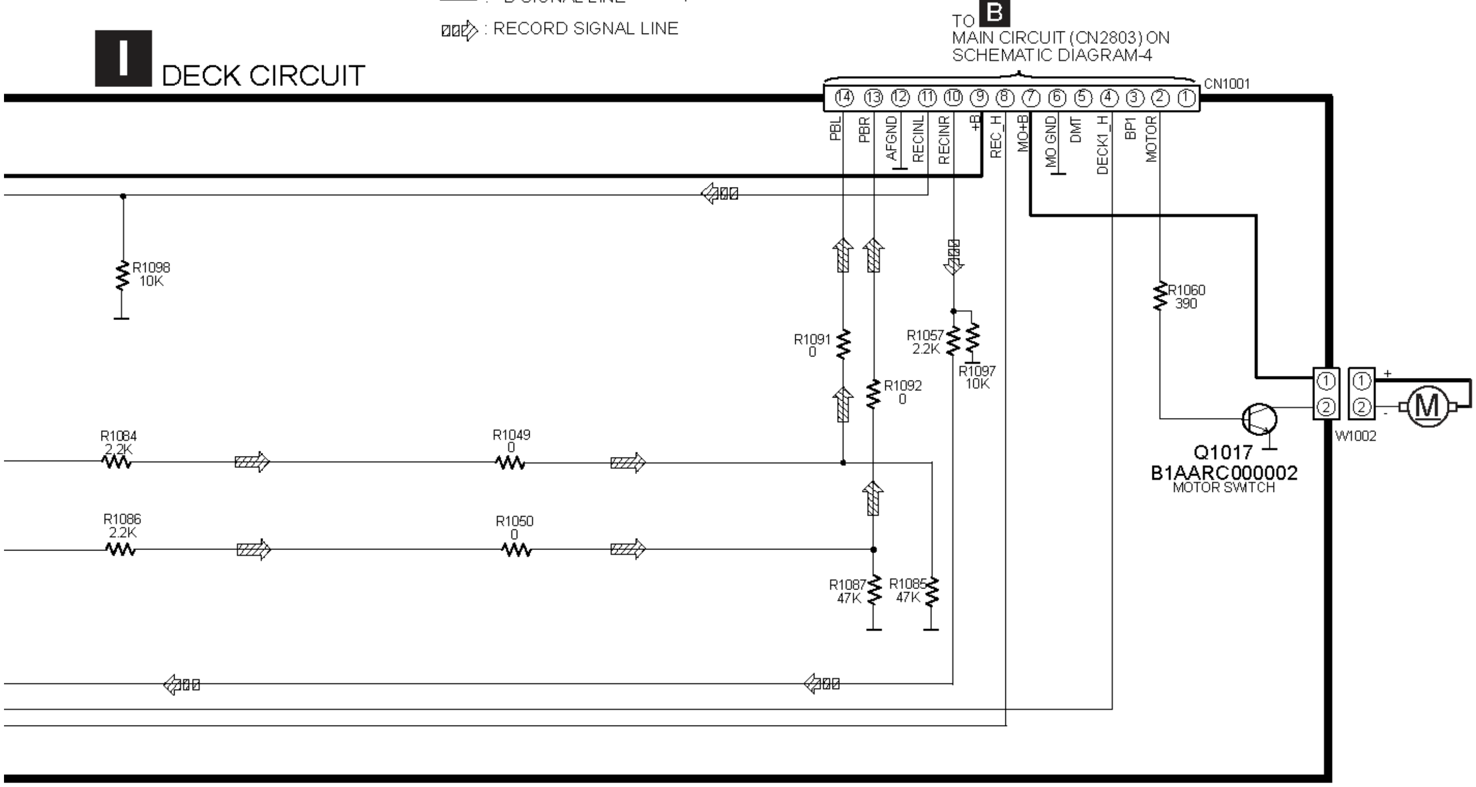
SCHEMATIC DIAGRAM - 13

: +B SIGNAL LINE

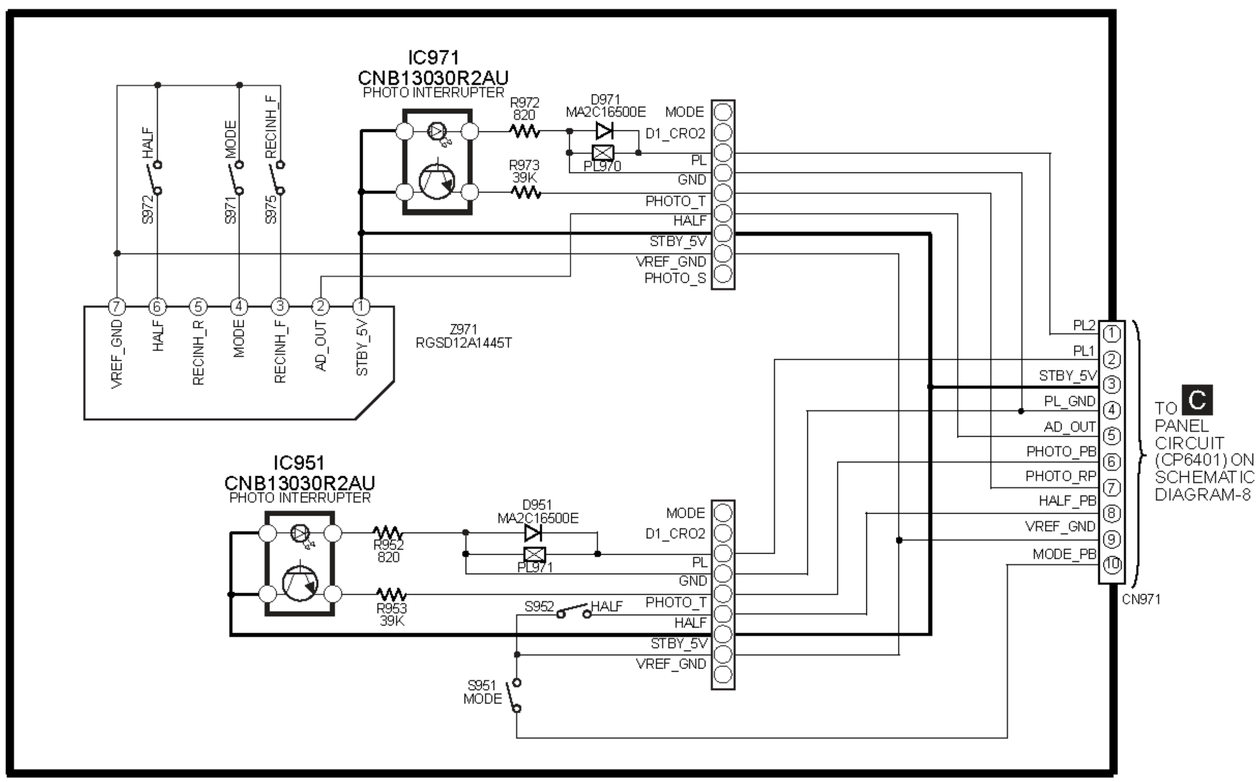
: RECORD SIGNAL LINE

: PLAYBACK SIGNAL LINE

I DECK CIRCUIT



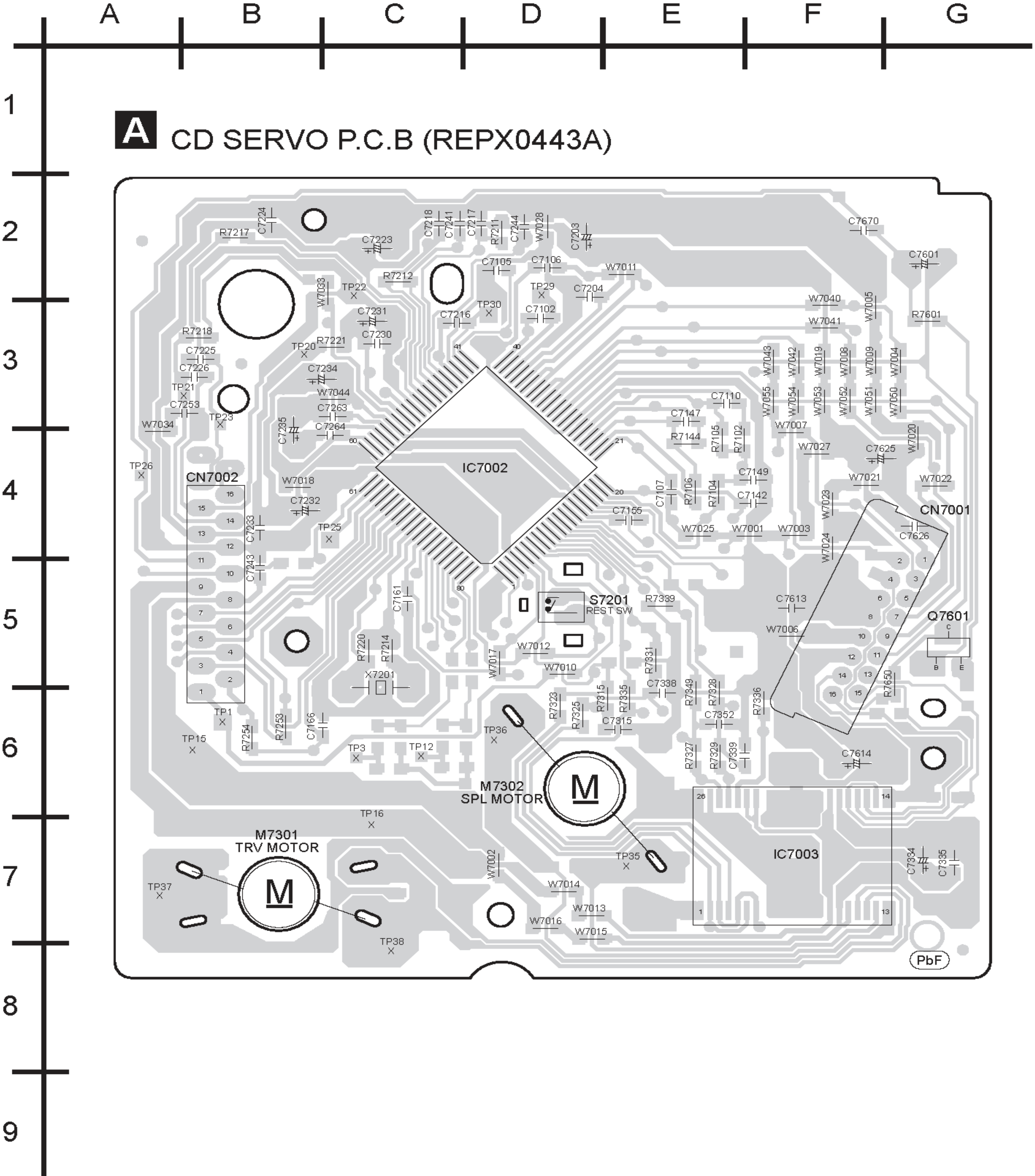
J DECK MECHANISM CIRCUIT

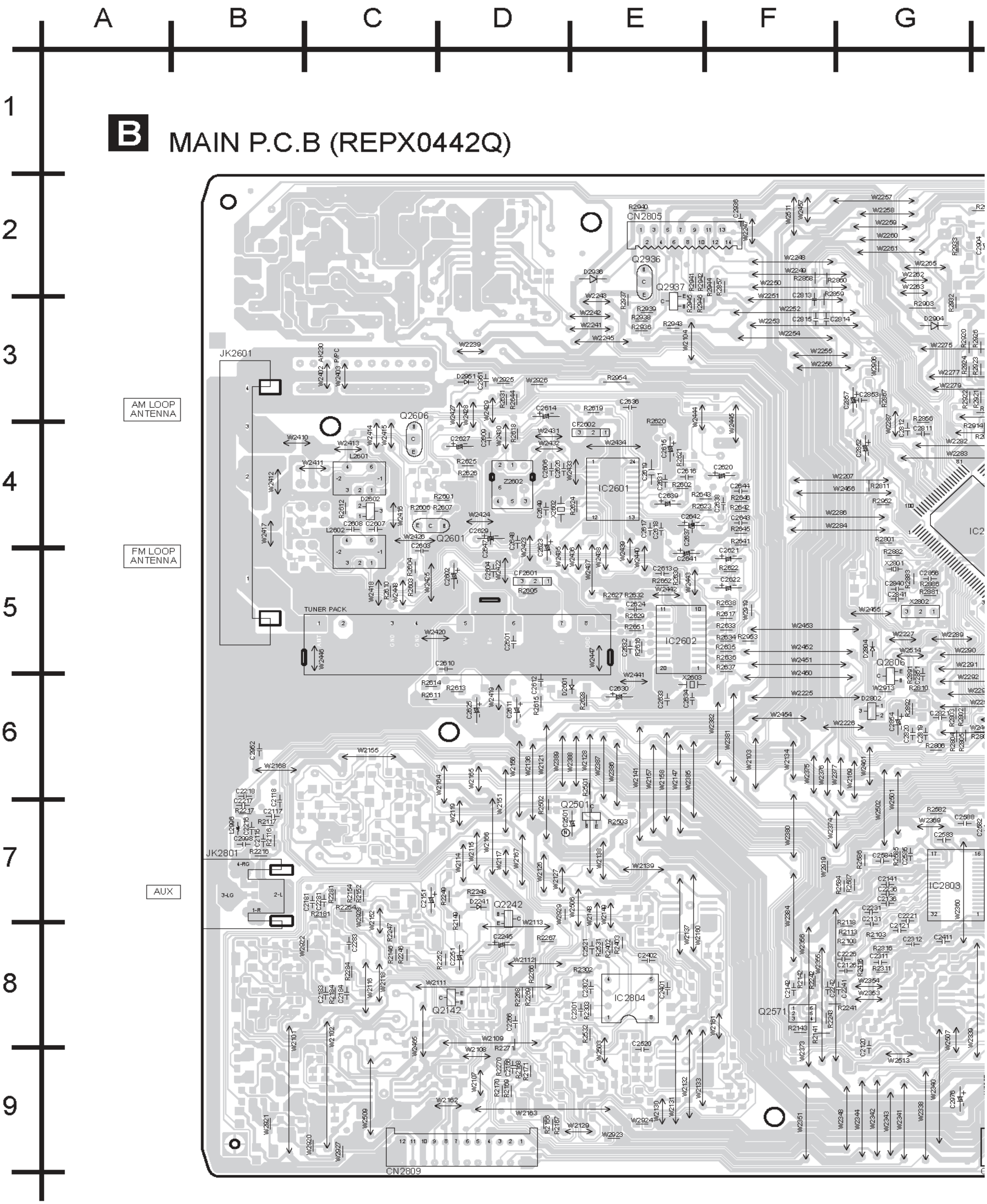


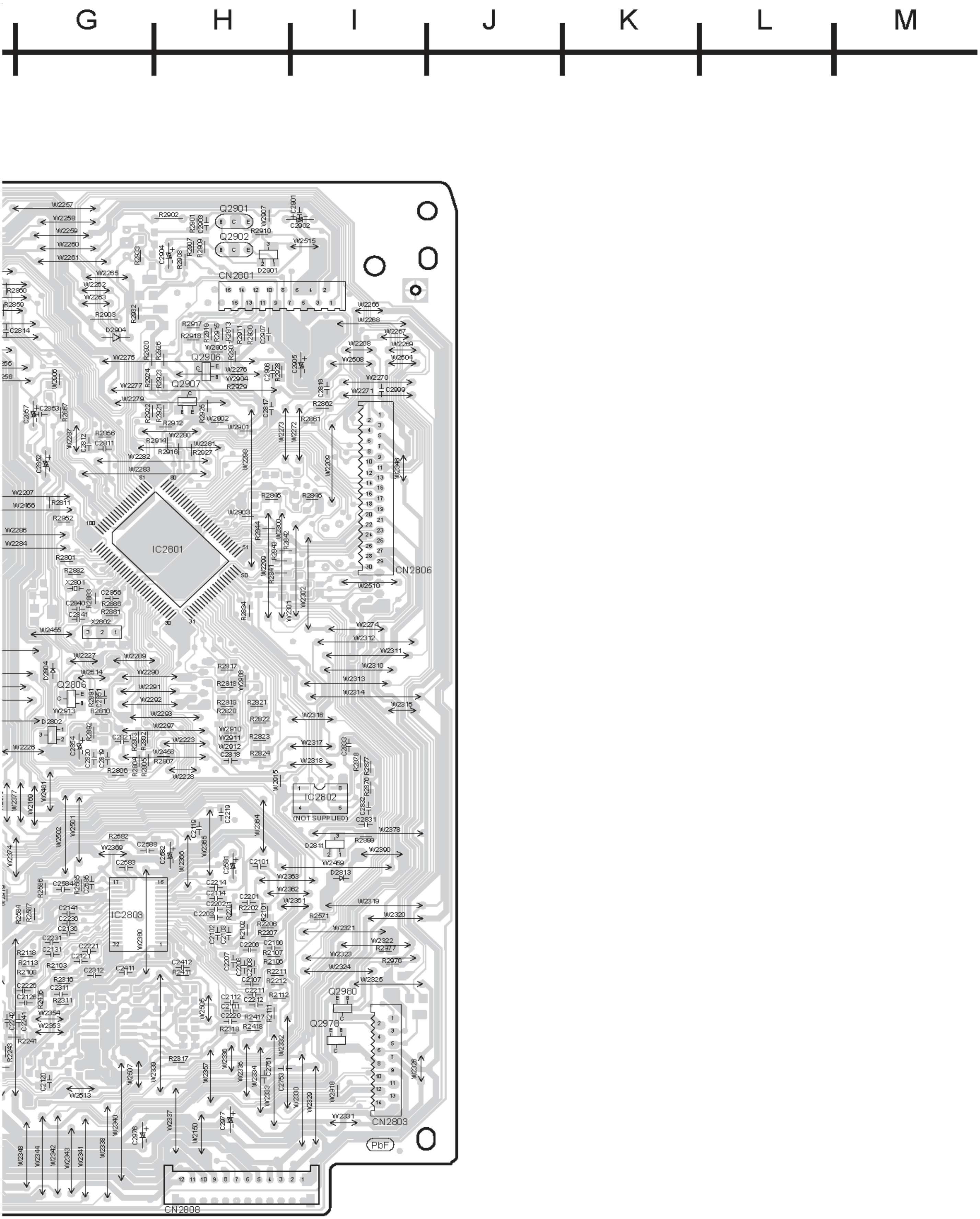
18 Printed Circuit Board

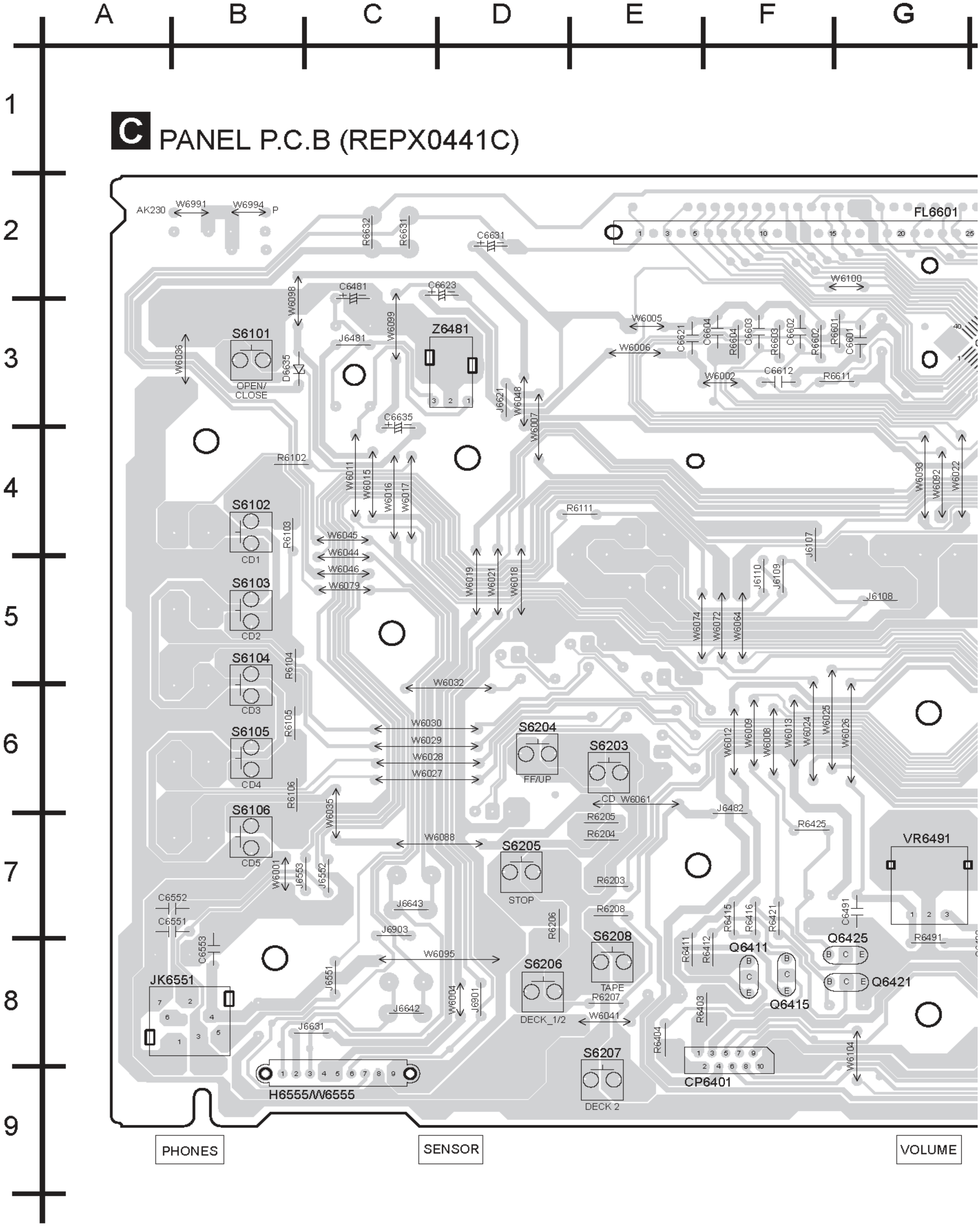
Note: Circuit board diagrams may be modified at any time with the development of new technology.

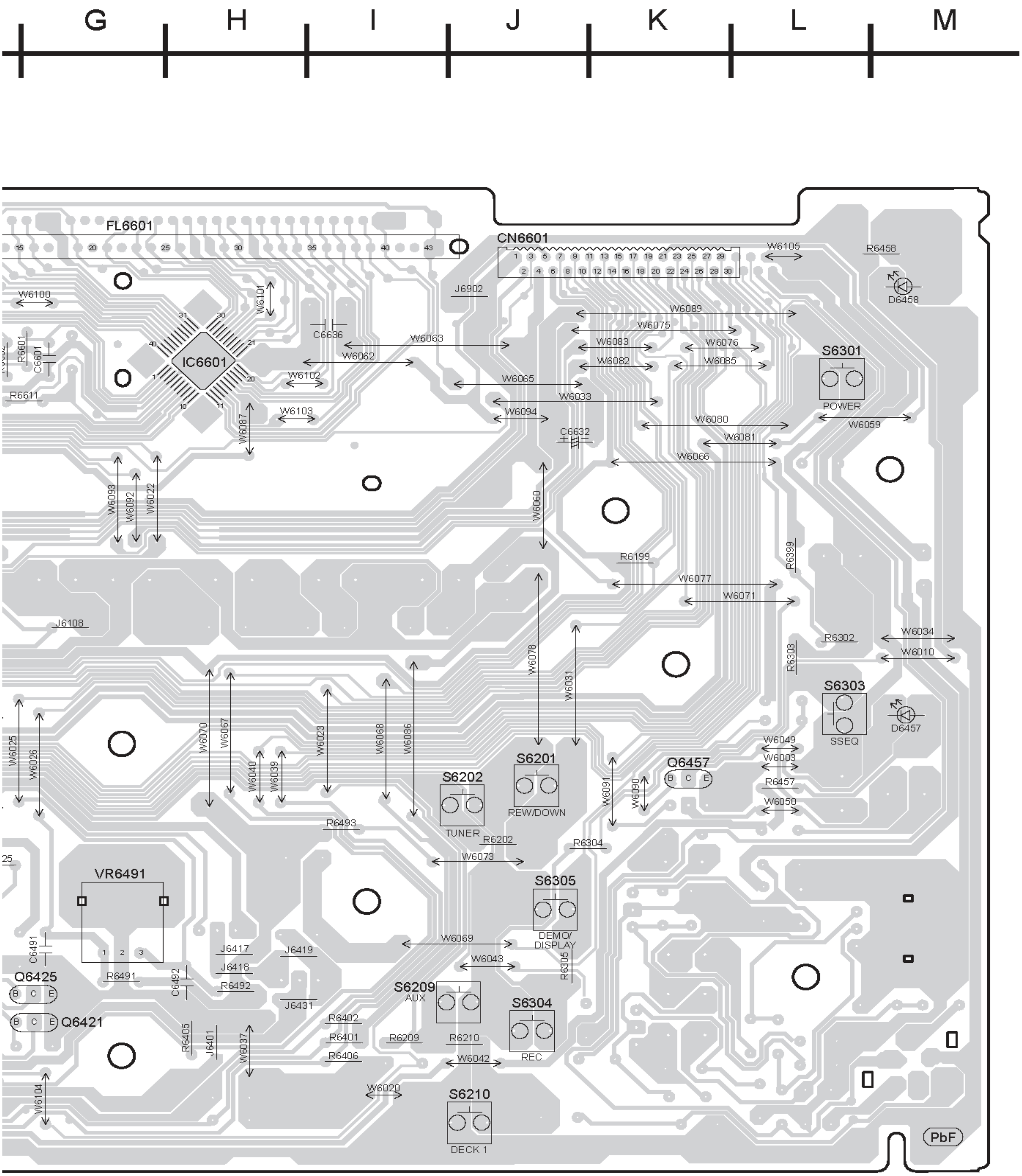
18.1 (A) CD Servo P.C.B.



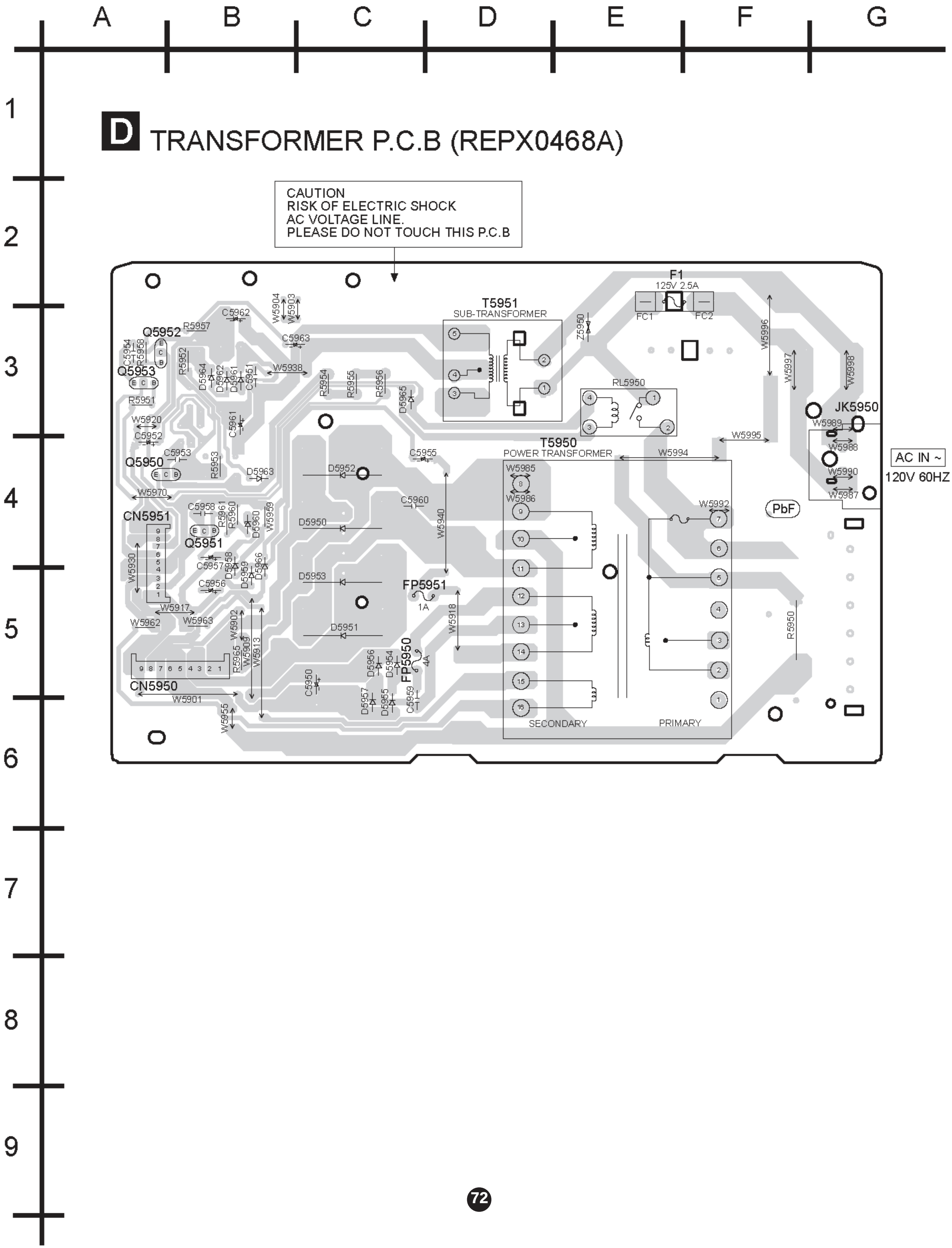

A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
B MAIN P.C.B (REPX0442Q)
AM LOOP ANTENNA
FM LOOP ANTENNA
AUX
JK2601
JK2801
TUNER PACK
IC2601
IC2602
IC2803
IC2804
CN2805
CN2809


G
H
I
J
K
L
M
IC2801
IC2802
(NOT SUPPLIED)
IC2803
CN2801
CN2806
CN2803
CN2808
Q2901
Q2902
Q2906
Q2907
Q2806
Q2980
Q2978
X2801
X2802
PbF


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
C PANEL P.C.B (REPX0441C)
FL6601
S6101
OPEN/
CLOSE
Z6481
S6102
CD1
S6103
CD2
S6104
CD3
S6105
CD4
S6106
CD5
S6204
FF/UP
S6203
CD
S6205
STOP
S6208
TAPE
S6206
DECK_1/2
S6207
DECK 2
VR6491
Q6411
Q6415
Q6425
Q6421
JK6551
H6555/W6555
CP6401
PHONES
SENSOR
VOLUME

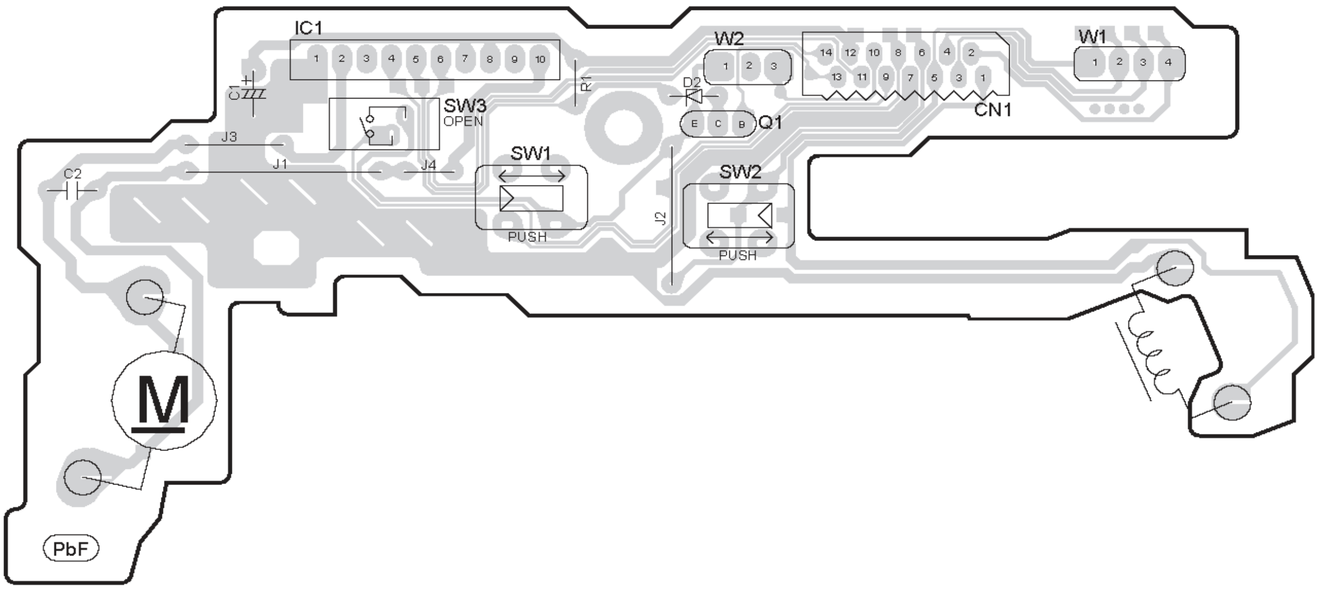

G
H
I
J
K
L
M
FL6601
CN6601
IC6601
S6301
POWER
S6303
SSEQ
S6201
REW/DOWN
S6202
TUNER
S6305
DEMO/
DISPLAY
S6209
AUX
S6304
REC
S6210
DECK 1
VR6491
Q6425
Q6421
Q6457
D6458
D6457
PbF

VOLUME

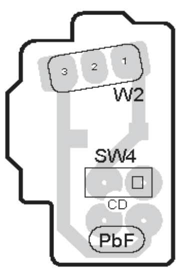

A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
D TRANSFORMER P.C.B (REPX0468A)
CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE.
PLEASE DO NOT TOUCH THIS P.C.B
F1
125V 2.5A
FC1
FC2
T5951
SUB-TRANSFORMER
RL5950
T5950
POWER TRANSFORMER
SECONDARY
PRIMARY
JK5950
AC IN ~
120V 60HZ
PbF
CN5951
CN5950
Q5950
Q5951
Q5952
Q5953
FP5950
FP5951
1A
4A

18.5 (E) CD Detect P.C.B., (F) Spindle Position P.C.B., (G) CD Loading P.C.B.& (K) Tuner Pack P.C.B.

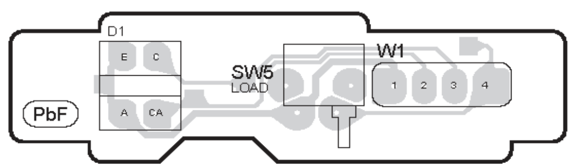
G CD LOADING P.C.B (REP2578A-N)



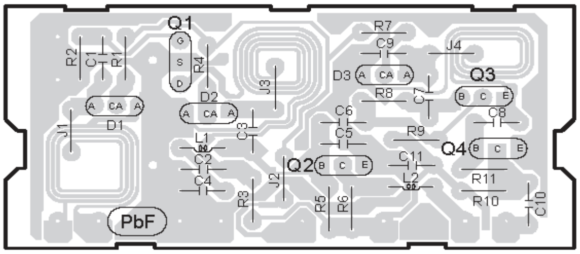
E CD DETECT P.C.B (REP2578A-N)



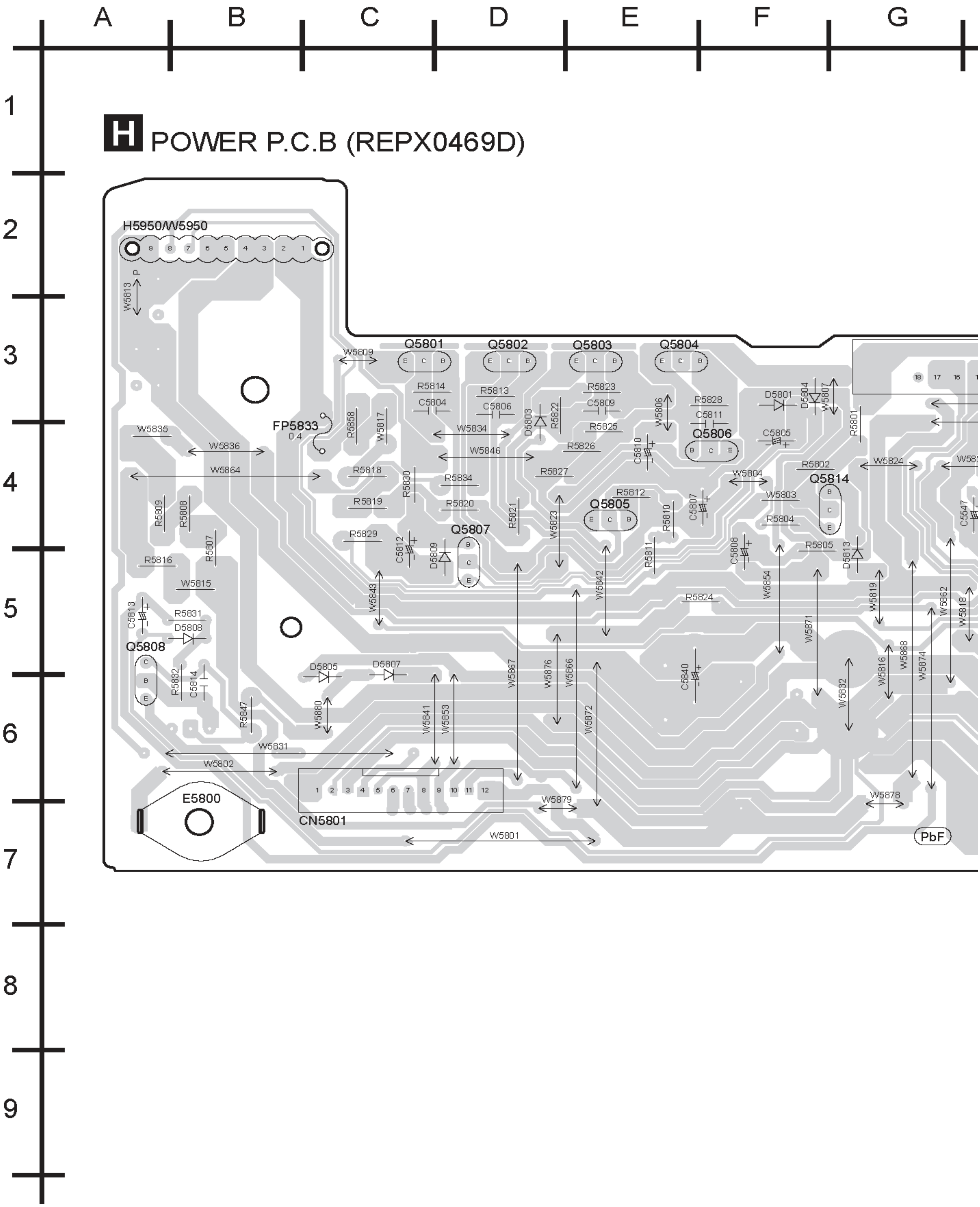
F SPINDLE POSITION P.C.B (REP2578A-N)

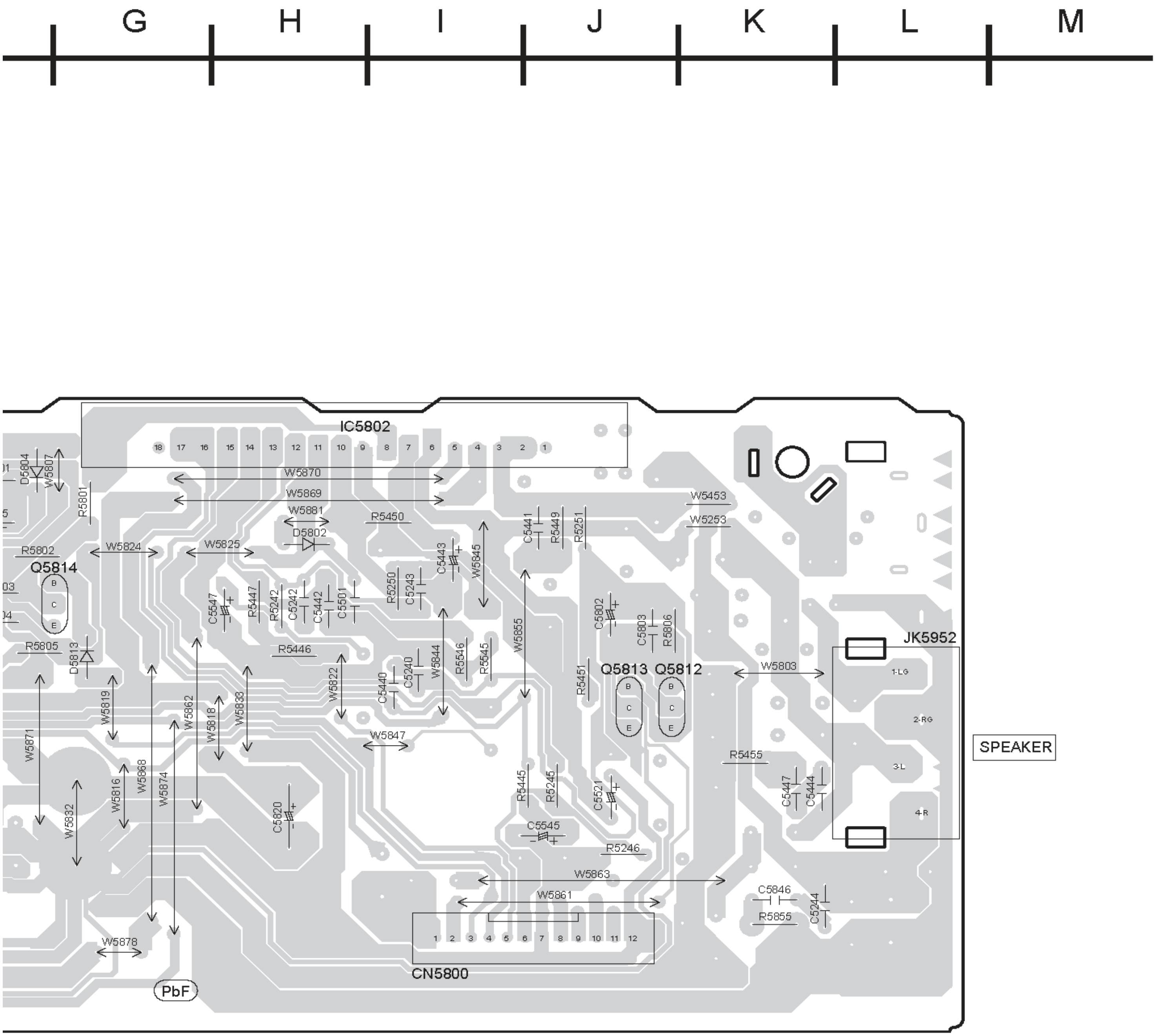


K TUNER PACK P.C.B (REP1999B)

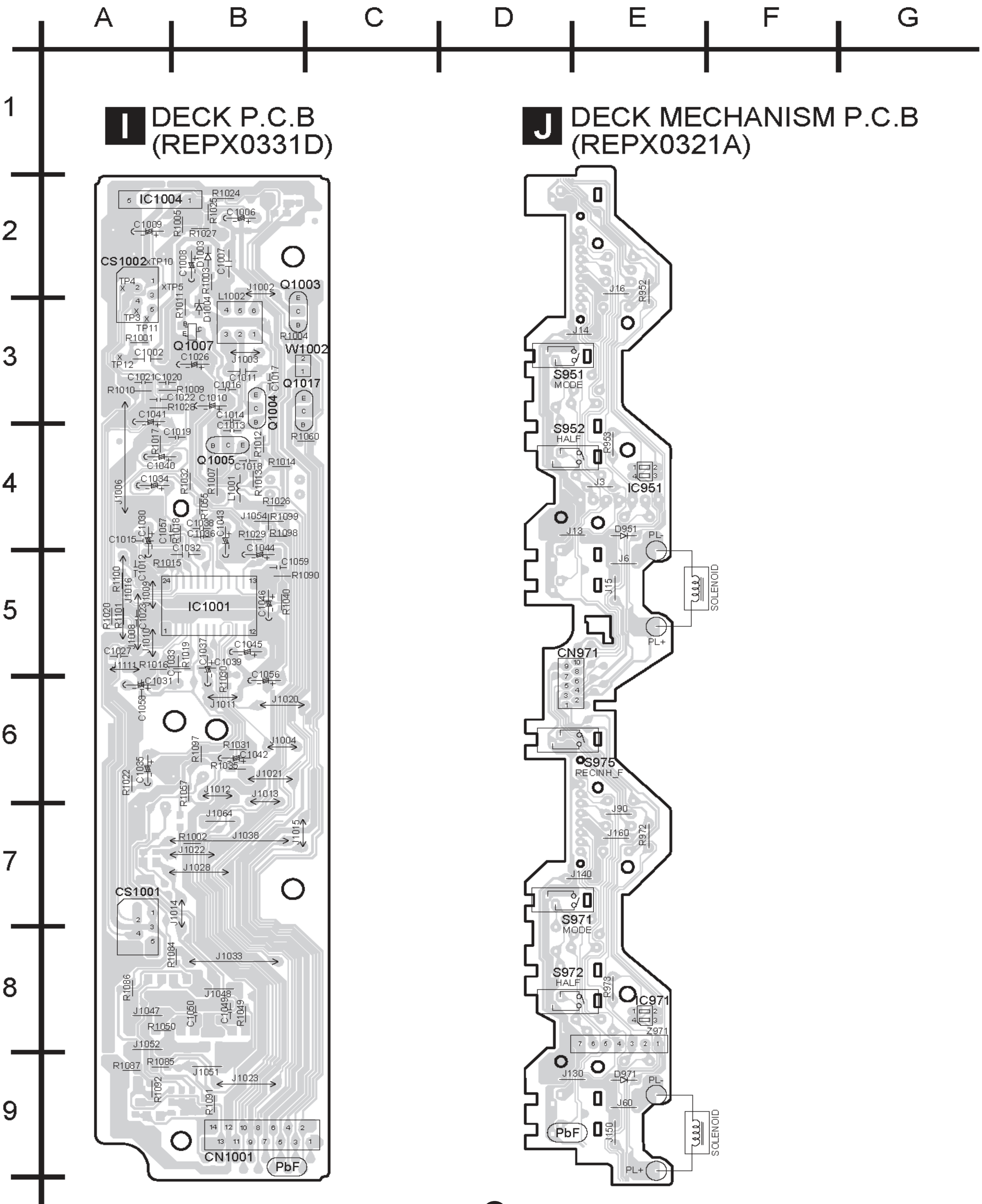


18.6 (H) Power P.C.B.

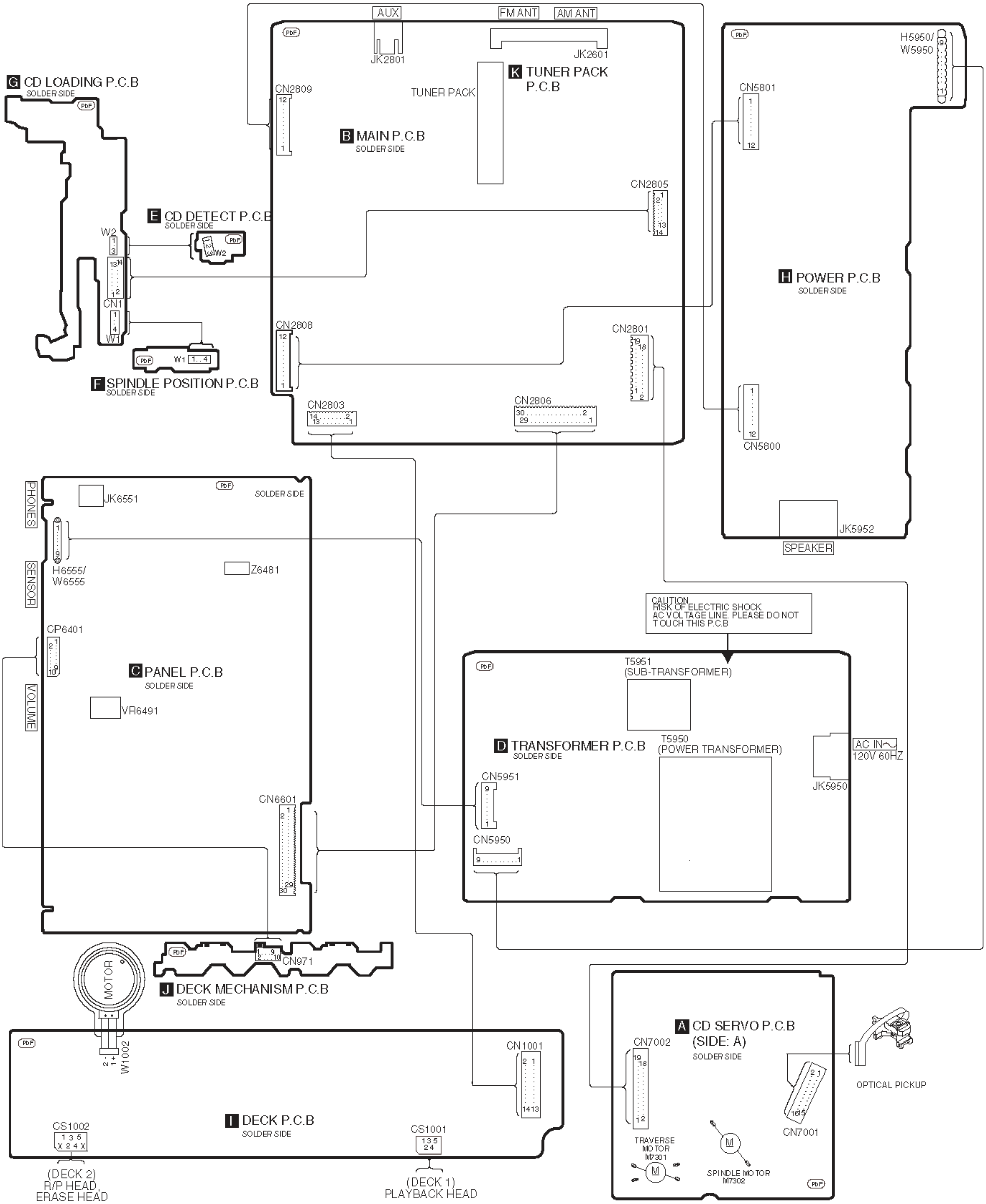



G
H
I
J
K
L
M
IC5802
W5870
W5869
W5881
R5450
D5802
W5824
W5825
Q5814
R5802
R5805
D5813
R5446
W5453
W5253
Q5813
Q5812
JK5952
W5803
W5847
R5455
C5545
R5246
W5863
W5861
C5846
R5855
C5244
W5878
CN5800
PbF
SPEAKER

18.7 (I) Deck P.C.B.& (J) Deck Mechanism P.C.B.



19 Wiring Connection Diagram



20 Illustration of IC's, Transistors and Diodes



21 Terminal Function of IC's

21.1 IC7002 (MN6627953HB) Servo processor/ Digital signal processor/ Digital filter/ D/A converter

Pin No.	Mark	I/O	Function
1	EXT0	I/O	Extend input/output port 0
2	EXT1	I/O	Extend input/output port 1
3	EXT2	I/O	Extend input/output port 2
4	PWMSEL	I	PWM output selectioninput(: Direct; H: Tri-State
5	SPOUT	O	Spindle driver output signal
6	SPPOL	O	Spindle driver output signal
7	TRVP	O	Spindle driver output signal
8	TRVM	O	Spindle driver output signal
9	TRVP2	O	Traverse driver output signal 2 (+)
10	TRVM2	O	Traverse driver output signal 2 (-)
11	TRP	O	Traverse driver output signal (+)
12	TRM	O	Traverse driver output signal (-)
13	FOP	O	Traverse driver output signal (+)
14	FOM	O	Traverse driver output signal (-)
15	IOVDD3	-	I/O power supply 3
16	DVDD1	-	Power supply 1 for digital circuit
17	DVSS1	-	Digital circuit GND 1
18	ADPVCC	I	Power voltage monitor. Power voltage input
19	TEIN	I	DSP traverse error signal input
20	FEIN	I	DSP focus error signal input
21	CEA	I/O	HPF-Amp capacitance connection terminal
22	RFENV	O	RF envelope signal monitor
23	FEOUT	O	FE Amp output
24	FEN	I	FE Amp reversal input
25	TEN	I	TE Amp reversal input
26	TEOUT	O	TE Amp output
27	VREF	O	VREF output
28	PD	I	APC Amp input
29	LD	O	APC Amp output
30	E	I	Tracking input signal 1
31	F	I	Tracking input signal 2
32	D	I	Tracking input signal 4
33	B	I	Tracking input signal 2
34	C	I	Tracking input signal 3
35	A	I	Focus input signal 1
36	DCDET	I	Detection HPF capacitance terminal
37	RFVDD	-	RF Amp power supply
38	RESERVE		- AVSS2
39	RFOUT	O	RF Amp output
40	RFIN	I	AGC input
41	CAGC	I/O	AGC control terminal
42	ARFOUT	O	AGC output (Audio RF)
43	AVSS2	-	Analog circuit GND 2
44	ARFIN	I	RF signal input
45	DSLF	O	DSL loop filter
46	IREF	I	I (current), Reference input
47	PLLF	O	PLL loop filter
48	PLLF0	O	PLL loop filter
49	AVDD2	-	Analog circuit power supply 2
50	OUTL	O	LCH output signal
51	AVSS1	-	Audio output circuit GND 1
52	N.C.	-	No Connection
53	AVDD1	-	Power supply 1 for analog circuit
54	OUTR	O	RCH output signal
55	DVSS2	-	Digital circuit GND 2
56	IOVDD1	-	I/O power supply 1
57	DVDD2	-	Power supply 2 for Digital circuit
58	REGON	I	Laser diode control (H: ON)
59	IOMODE	I	I/O switching setting input
60	NTEST	I	Test mode setting input (H: ON)
61	TX	O	Digital audio interface output
62	FLAG	O	Flag signal output
63	MCLK	I	Micro-P serial command CLK
64	MDATA	I	Micro-P serial command DATA
65	MLD	I	Micro-P serial command LOAD
66	STAT	O	Status signal output

Pin No.	Mark	I/O	Function
67	BLKCK	O	Subcode block clock
68	NRST	I	LSI reset input (L: RESET)
69	DVSS3	-	Digital circuit GND 3
70	X2	O	Crystal oscillator circuit output
71	X1	I	Crystal oscillator circuit input
72	IOVDD2	I	I/O power supply 2
73	DQSY	O	Pack signal output for CD-Text data
74	TXTD	O	CDText signal output
75	TXTCK	I	External clock signal input for CD-Text register
76	GIO0	I/O	General purpose input/ output Terminal 0
77	GIO1	I/O	General purpose input/ output Terminal 1
78	GIO2	I/O	General purpose input/ output Terminal 2
79	GOUT0	O	General purpose output Terminal 0
80	GOUT1	O	General purpose output Terminal 1

21.2 IC7003 (AN8739SBTE2) Focus coil/ Tracking coil/ Traverse motor/ Spindle motor drive

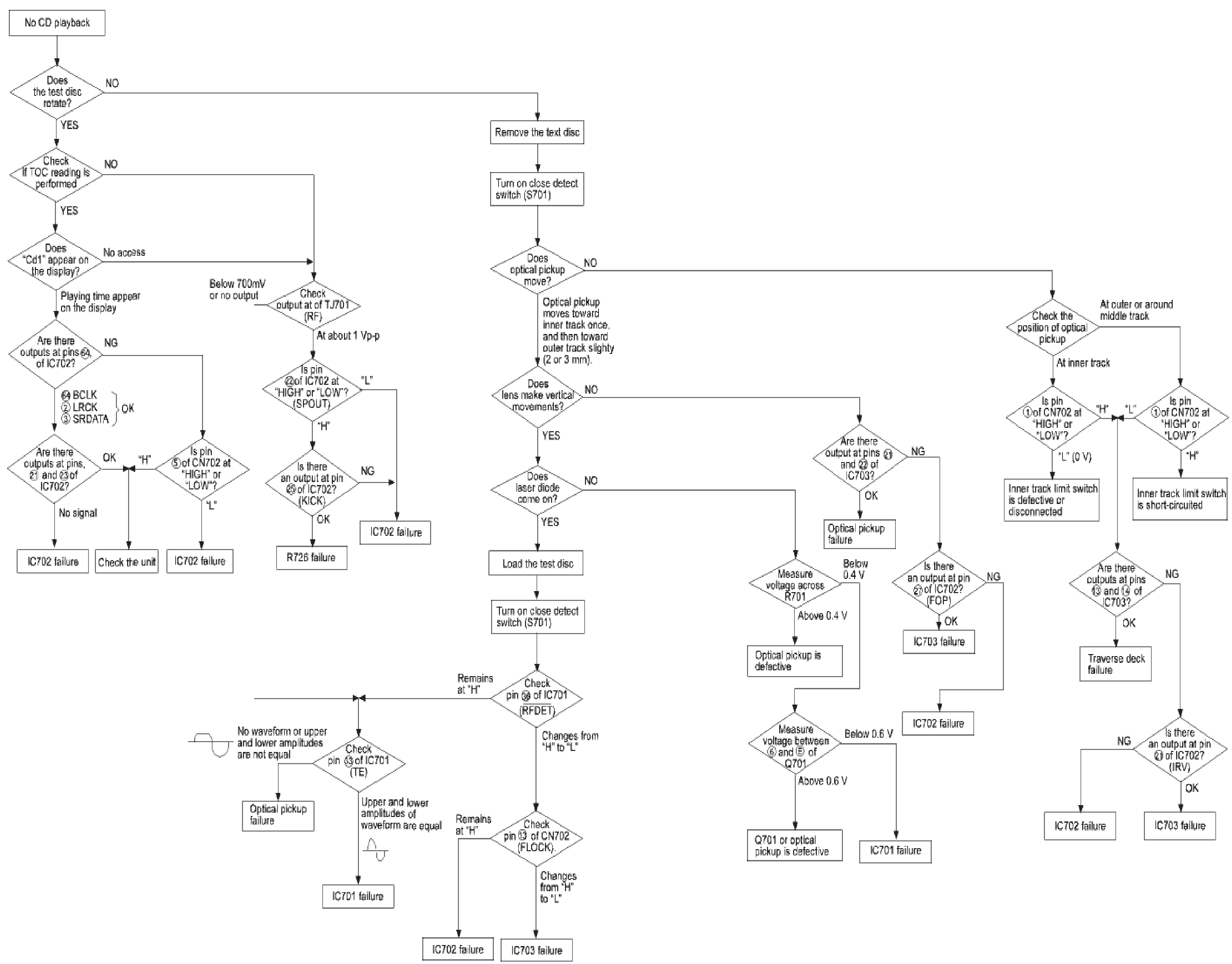
Pin No.	Mark	I/O	Function
1	/RST	O	RESET output terminal
2	NC	-	N.C.
3	IN2	I	Motor drive (2) input
4	PC2	I	Turntable motor drive signal ("L" :ON)
5	NC	-	N.C.
6	IN1	I	Motor driver (1) input
7	PVCC1	-	Power supply (1) for driver
8	PGND1	-	Ground connection (1) for driver
9	NC	-	N.C.
10	D1-	O	Motor driver (1) reverse-action output
11	D1+	O	Motor driver (1) forward-action output
12	D2-	O	Motor driver (2) reverse-action output
13	D2+	O	Motor driver (2) forward-action output
14	D3-	O	Motor driver (3) reverse-action output
15	D3+	O	Crystal oscillating circuit input (f = 16.9344MHz)
16	D4-	O	Motor driver (4) reverse-action output
17	D4+	O	Motor driver (4) forward-action output
18	NC	-	N.C.
19	PGND2	-	Ground connection (2) for driver
20	PVCC2	-	Power supply (2) for driver
21	VCC	-	Power supply terminal
22	VREF	-	Reference voltage input
23	IN4	I	Motor driver (4) input
24	IN3	I	Motor driver (3) input
25	RSTIN	I	Reset terminal
26	NC	-	N.C.

21.3 IC2801 (CC2CBJG000564) System Microprocessor

Pin No.	Mark	I/O	Function
1	LM_1	I	Level Meter Left
2	N.C.	-	No Connection
3	PLL_CE	O	PLL Chip Select
4	RDS_DAT	I	RDS Data Input
5	RDS_CLK	I	RDS Clock Input
6	N.C.	-	No Connection
7	N.C.	-	No Connection
8	BYTE	I	External Data Bus Width Select Input
9	CNVss/EFP_ CNVss	-	Flash Mode Terminal (Connect to ground)
10	Xcin	-	32.768 kHz Sub Clock
11	Xcout	-	32.768 kHz Sub Clock
12	/RESET/EFP_ RESET	I	Reset Input (ACTIVE L)
13	Xout	-	10 MHz Main Clock
14	Vss	-	Ground (0V)
15	Xin	-	10 MHz Main Clock
16	Vcc	-	Power Supply (+5V)
17	/NMI	-	Connect to Vcc (+5V)
18	RMT	I	Remote Control Input
19	BLKCK	I	CD Block Clock Input (Inverted)
20	SYNC	I	AC Failure Detect Input
21	ST/DO	I	Tuner IF Data/ Stereo Input
22	SD	I	Tuner Signal Detect Input
23	Harmonic_ SW	I/O	*3 Harmonic Switch (Active L)
24	SW_LVL 1	O	*4 Sub-Woofer Level 1
25	SW_LVL 2	O	*4 Sub-Woofer Level 2
26	ASP_DAT	O	ASP Data
27	ASP_CLK	O	ASP Clock
28	N.C.	-	No Connection
29	PLL_DATA	O	PLL DATA
30	PLL_CLK	O	PLLCLK
31	REG 8/EFP_ RxD1	I	Region Setting 8 (Subwoofer)
32	REG 7/ EFP_ RxD1	I	Region Setting 7 (MIC)
33	REG 6/EFP_ SCLK	I	Region Setting 6 (RDS)
34	REG 5/ EFP_ BUSY	I	Region Setting 5 (Optical Out)
35	REG 4	I	Region Setting 4 (Deck Mechanism)
36	REG 3	I	Region Setting 3 (Tuner)
37	REG 2	I	Region Setting 2 (Tuner)
38	REG 1	I	Region Setting 1 (Tuner)
39	MUTE_H	O	HIC Mute
40	MUTE_A	O	Audio Mute
41	EE_CS/EFP_ /EPM	O	EEPROM Chip Select
42	EE_CLK	O	EEPROM Clock
43	EE_DAT	I/O	EEPROM Data
44	N.C.	-	No Connection
45	N.C.	-	No Connection
46	PCONT/ EFP _/CE	O	Main Transformer Control Output
47	DCDET	I	DC Detect Input
48-51	N.C.	-	No Connection
52	HALF_1	I	Deck 1 Half Playback Input
53	MODE_1	I	Deck 1 Mode Playback Input
54	SW_LED	O	*2 Sub Woofer LED
55	N.C.	-	No Connection
56	PLG1	O	Deck 1 plunger control
57	PLG2	O	Deck 2 plunger control
58	MTR	I/O	Deck motor control ("L" for motor ON)

Pin No.	Mark	I/O	Function
59	REC	/O	L when record circuit is operating
60	DECK1_H	O	H when DECK 1 P/B head is selected
61	N.C.	-	No Connection
62	Vcc	-	Power Supply (+5V)
63	N.C.	-	No Connection
64	Vss	-	Ground (0V)
65-66	N.C.	-	No Connection
67	V_JOG_A	I	Volume Jog A
68	V_JOG_B	I	Volume Jog B
69	EX1_CLK	I/O	*1 I/O Expander Clock
70	EX1_DAT	I	*1 I/O Expander Data
71	/FL_RESET	O	Reset Input (ACTIVE L)
72	FL_CS	I/O	FL Driver Chip Select
73	FL_DOUT	O	Serial Data To FL Driver (Output)
74	FL_CLK	I/O	Serial Clock To FL Driver
75	N.C.	-	No Connection
76	SSEQ_LED	O	Super Sound EQ LED
77	CD_RST	O	CD Reset Output
78	STATUS	I	CD Servo LSI Status Input
79	MLD	O	CD Command Load Output
80	MDATA_OUT	O	CD Command Data Output
81	MCLK	O	CD Command Clock Output
82	/RESTSW	I	CD Limit Switch Input for the Most Inner Point (Active Low)
83	CHG_HLF	O	Changer Half Drive Output
84	CHG_CW	O	Changer Motor Clockwise Output
85	CHG_CCW	O	Changer Motor Counterclockwise Output
86	CHG_SW1	I	CD Changer Switch 1 Input
87	CHG_SW2	I	CD Changer Switch 2 Input
88	CHG_PLR	O	Changer Plunger Output
89	CHG_AD2	I	Changer AD Detection Input (Position/Bottom)
90	CHG_AD1	I	Changer AD Detection Input (Open/Clamp)
91	DECK2	I	DECK CONDITION INPUT 2(R_INHF/ MODE2/HALF2)
92	KEY3	I	KEY3 INPUT
93	KEY2	I	KEY2 INPUT
94	KEY1	I	KEY1 INPUT
95	PHOTO_2	I	Rotation Detection Signal (Deck 2)
96	AVss	-	Analog Power Supply Input (Connect to GND)
97	PHOTO_1	I	Rotation Detection Signal (Deck 1)
98	VREF	-	Reference for A-D (5V)
99	AVcc	-	Analog Power Supply Input
100	Demo Selector	I	(H= default demo on, L= default demo off.)

22 Troubleshooting Guide



23 Parts Location and Replacement Parts List

Notes:

- Important safety notice:

  Components identified by mark have special characteristics important for safety.

  Furthermore, special parts which have purposes of fire-retardent (resistors), high-quality sound (capacitors), low noise (resistors), etc are used.

  When replacing any of these components, be sure to use only manufacturer's specified parts shown in the parts list.

- The parenthesized indications in the Remarks columns specify the areas or colour. (Refer to the cover page for area or colour)

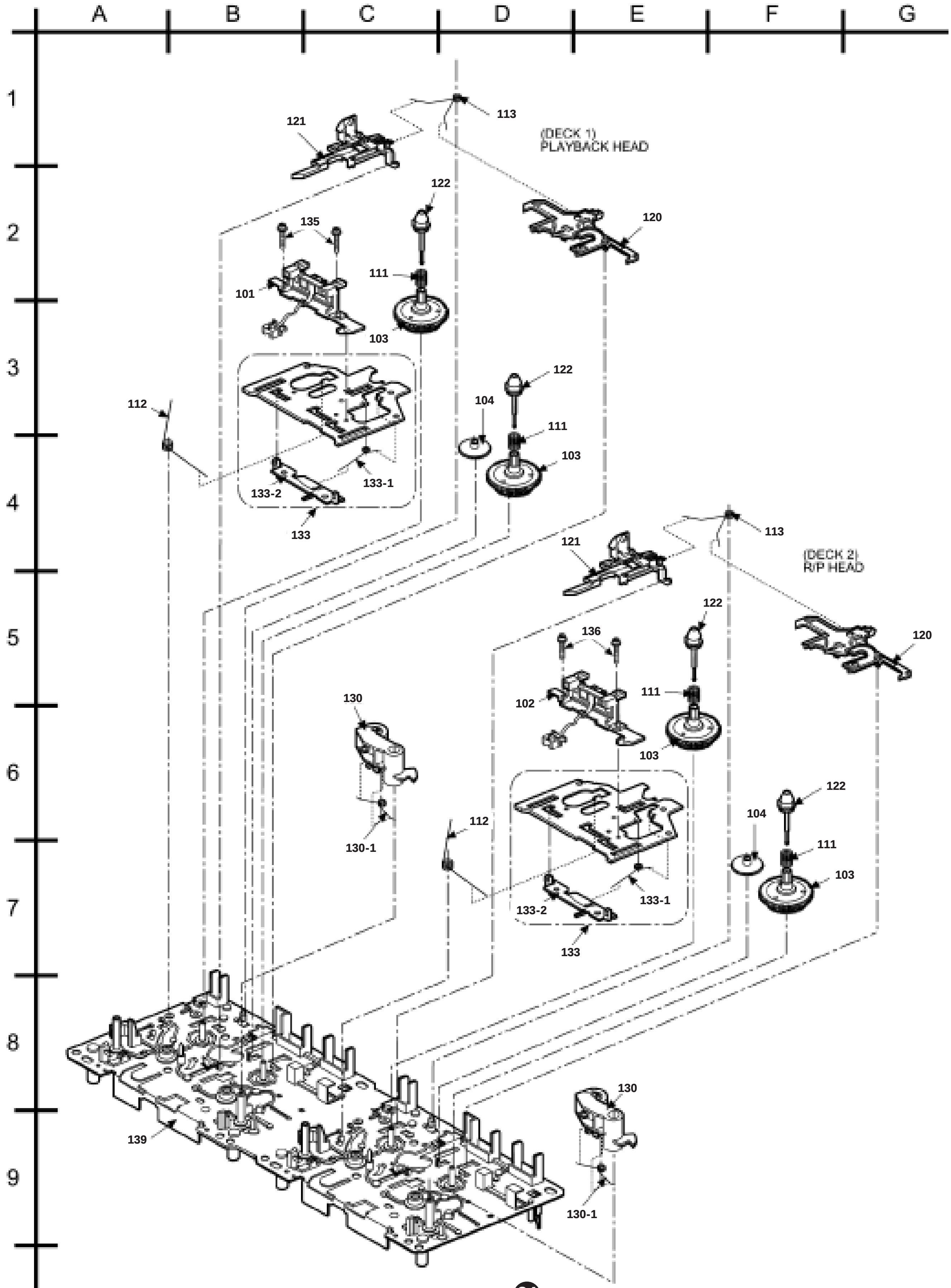
  Parts without these indications can be used for all areas.

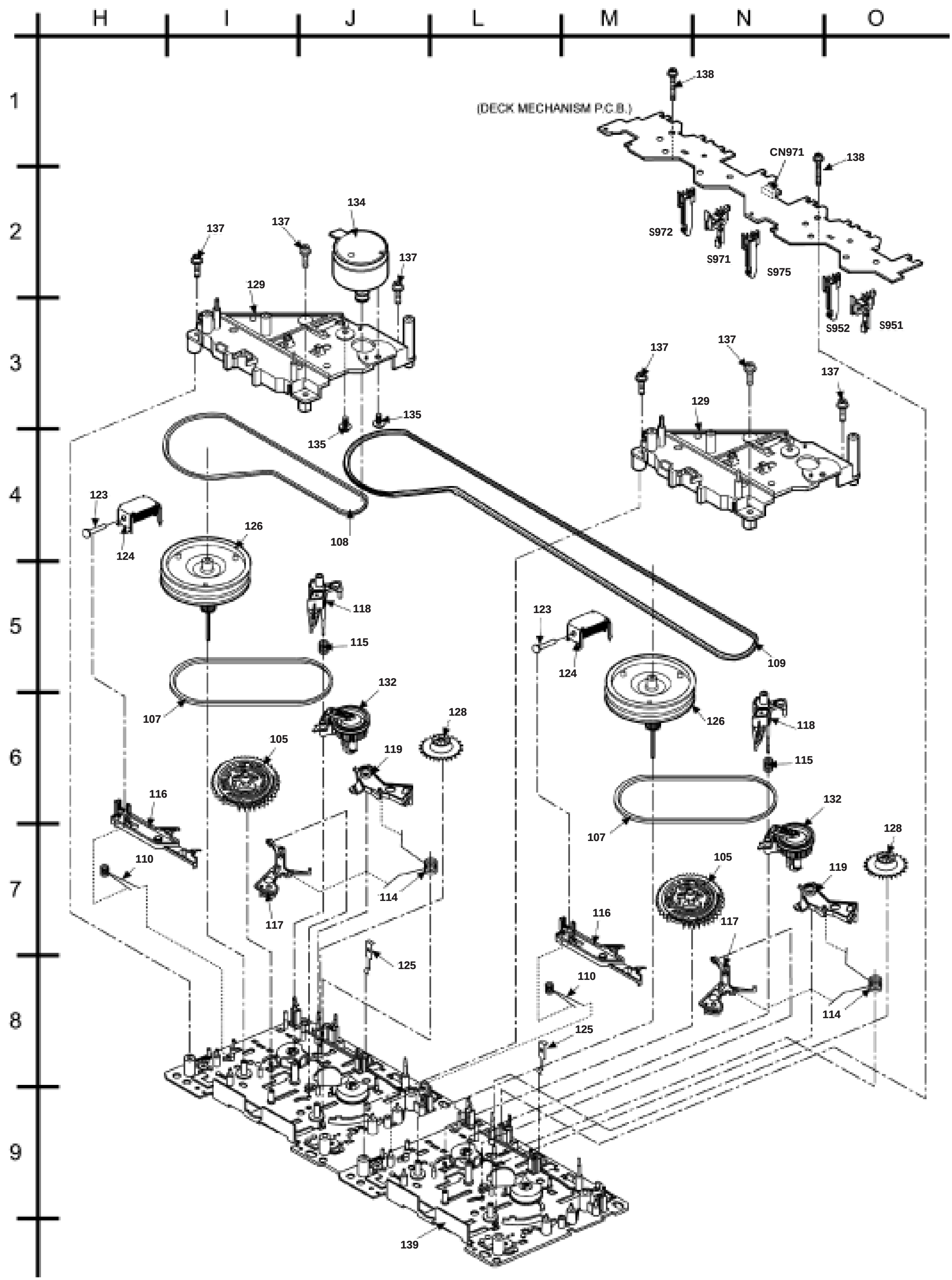
- Warning: This product uses a laser diode. Refer to caution statements on "Precaution of Laser Diode".
- Capacitor values are in microfarads (˜F) unless specified otherwise, P= Pico-farads (pF), F= Farads.
- Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM).
- The marking (RTL) indicates that the Retention Time is limited for this items. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of a availabilityis dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.
- [M] Indicates in the Remarks columns indicates parts supplied by PAVCSG.
- The "(SF)" mark denotes the standard part.
- Reference for O/I book languages are as follows:

Ar:	Arabic	Du:	Dutch	It:	Italian	Sp	Spanish
Cf:	Canadian French	En:	English	Ko:	Korean	Sw:	Swedish
Cz:	Czech	Fr:	French	Po:	Polish	Co:	Traditional Chinese
Da:	Danish	Ge:	German	Ru:	Russian	Cn:	Simplified Chinese
Pe:	Persian						

23.1 Deck Mechanism (RAA4502-S)

23.1.1 Deck Mechanism Parts Location





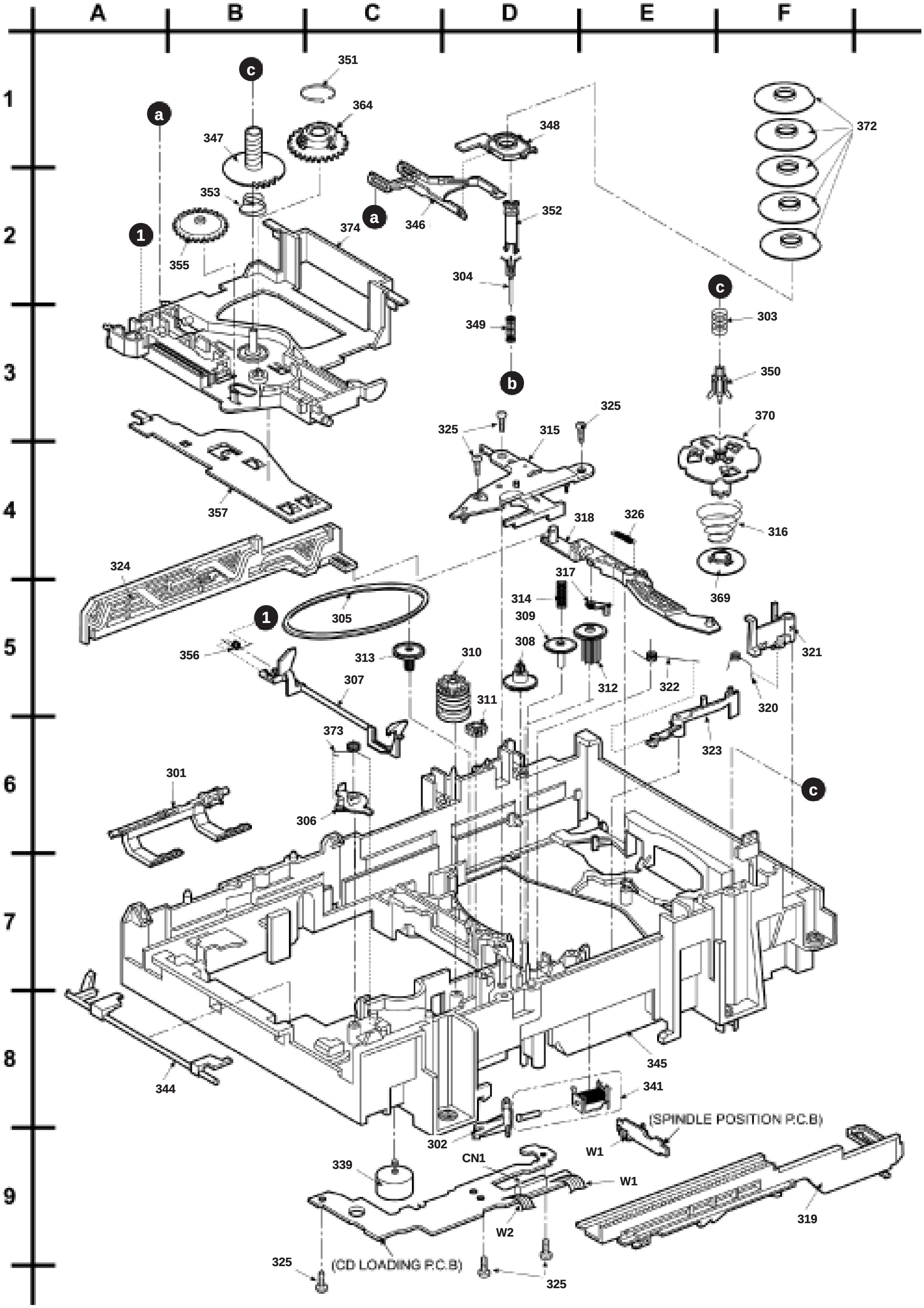
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(DECK MECHANISM P.C.B.)
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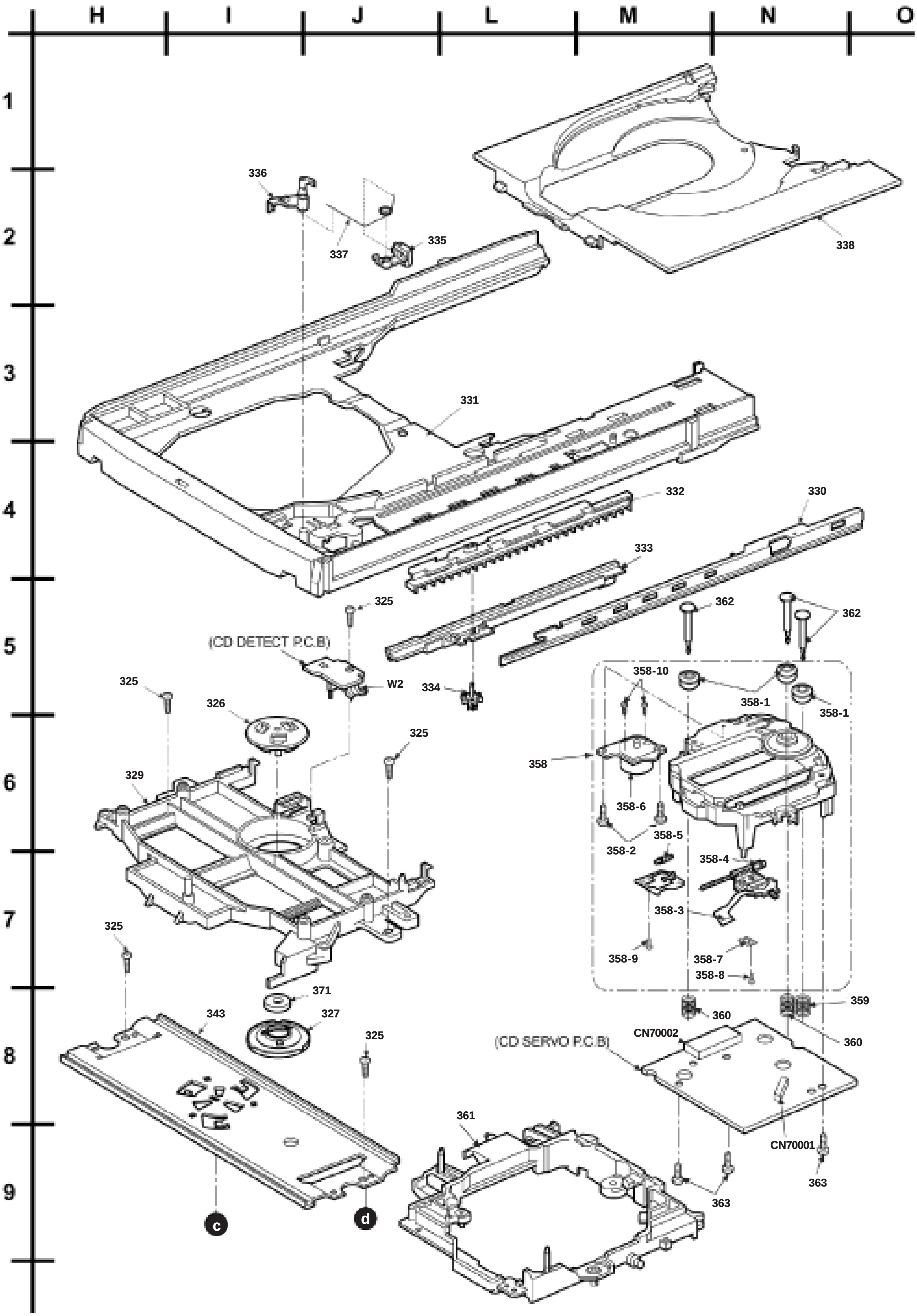
23.1.2 Deck Mechanism Parts List

Ref. No.	Part No.	Part Name & Description CASSETTE DECK	Remarks
101	RED0069	R/P HEAD BLOCK UNIT	[M]
102	RED0070	P/B HEAD BLOCK UNIT	[M]
103	RDG0300	REEL BASE GEAR	[M]
104	RDG0301	WINDING RELAY GEAR	[M]
105	RDK0026	MAIN GEAR	[M]
107	RDV0033-4	WINDING BELT	[M]
108	RDV0064	CAPSTAN BELT A	[M]
109	RDV0071	CAPSTAN BELT B	[M]
110	RMB0312	TRIGGER LEVER SPRING	[M]
111	RMB0400	REEL SPRING	[M]
112	RMB0403	HEAD PANEL SPRING	[M]
113	RMB0404	BRAKE ROD SPRING	[M]
114	RMB0406	FR LEVER SPRING	[M]
115	RMB0408	THRUST SPRING	[M]
116	RML0370	TRIGGER LEVER	[M]
117	RML0371	FR LEVER	[M]
118	RML0372	WINDING LEVER	[M]
119	RML0374	EJECT LEVER	[M]
120	RMM0131	BRAKE ROD	[M]
121	RMM0133	EJECT ROD	[M]
122	RMQ0519	REEL HUB	[M]
123	RMS0398-1	MOVING CORE	[M]
124	RSJ0003	PLUNGER ASS'Y	[M]
125	RMC0061	PACK SPRING	[M]
126	RXF0061	FLYWHEEL F ASS'Y	[M]
128	RXG0040	FF RELAY GEAR ASS'Y	[M]
129	RMK0283A-J	SUB-CHASSIS	[M]
130	RXL0124	PINCH ROLLER F ASS'Y	[M]
130-1	RMB0401	PINCH ARM SPRING F	[M]
132	RXL0126	WINDING ARM ASS'Y	[M]
133	RXQ0412	HEAD PANEL ASS'Y	[M]
133-1	RMB0405	FR ROD SPRING	[M]
133-2	RMM0132	FR ROD	[M]
134	REM0121	CAP MOTOR ASS'Y	[M]
135	RHD26022	MOTOR SCREW	[M]
136	XTW2+5L	HEAD BLOCK UNIT SCREW	[M]
137	XTW26+10S	SUB-CHASSIS SCREW	[M]
138	XYC2+JF17	PCB EARTH SCREW	[M]
139	RFKJAA4501-S	CHASSIS ASS'Y	[M]

23.2 CD Loading Mechanism (RD-DAC026-S)

23.2.1 CD Loading Mechanism Parts Location





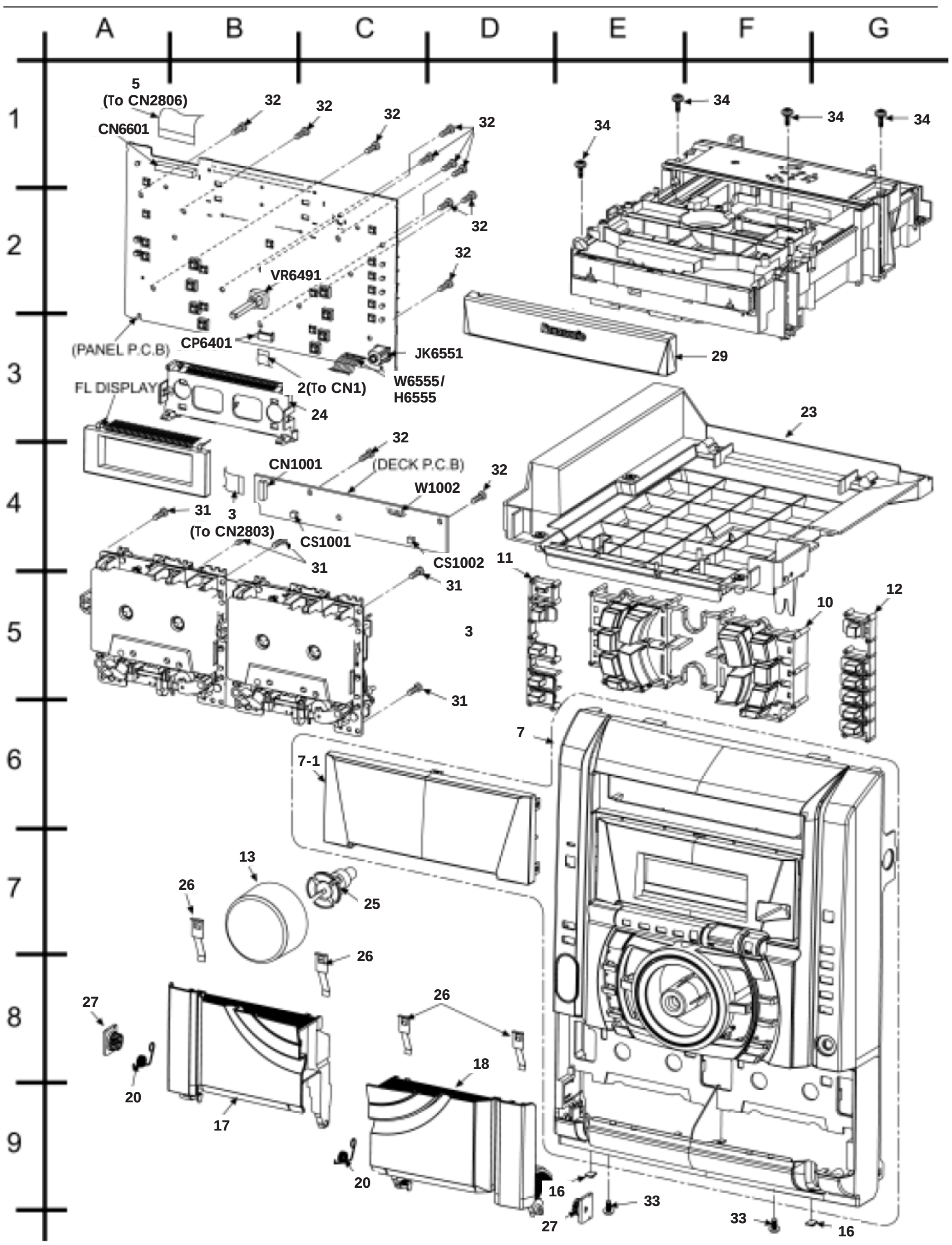
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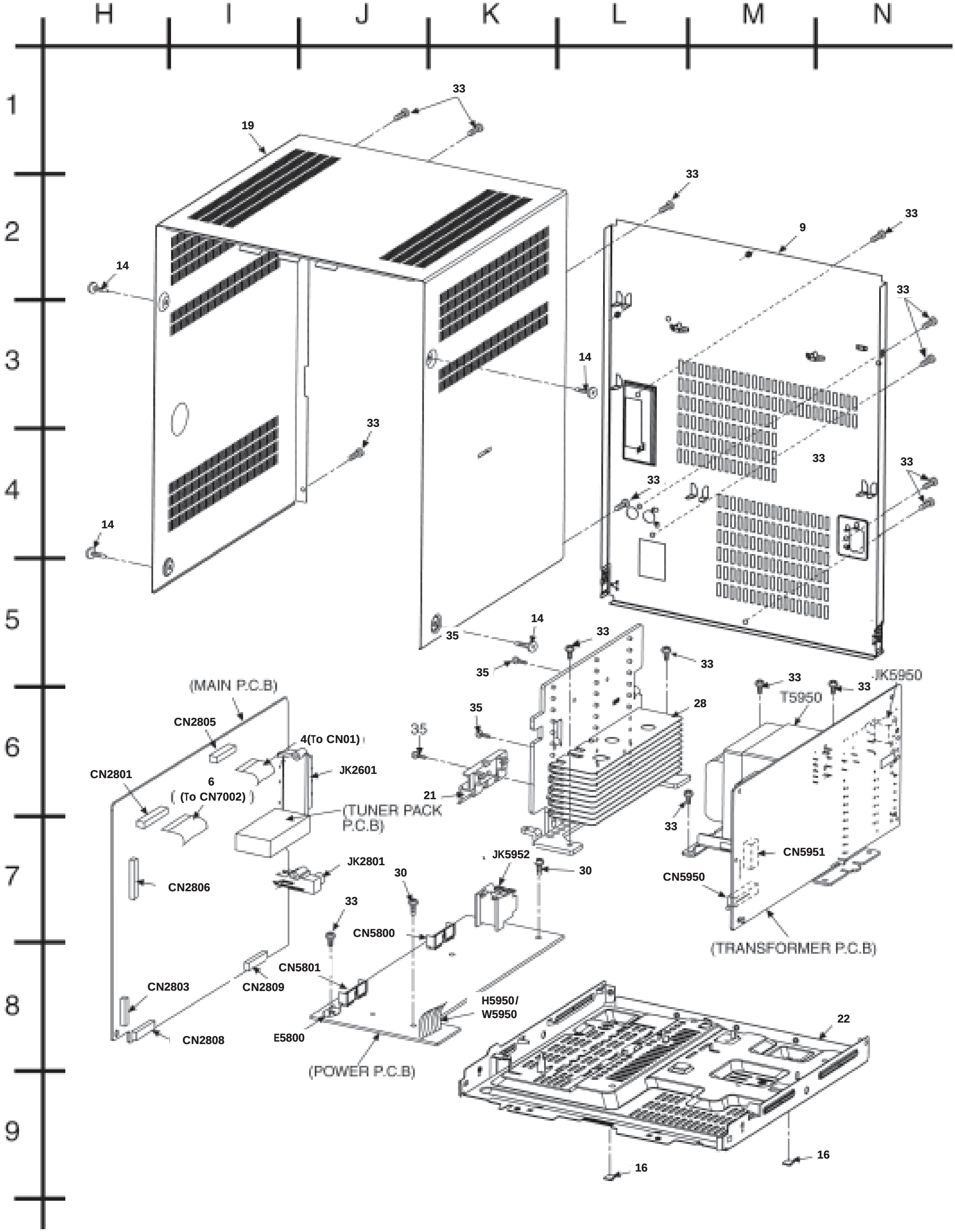
23.2.2 CD Loading Mechanism Parts List

Ref. No.	Part No.	Part Name & Description TRAVERSE DECK	Rema
301	RML0517	TIMING LEVER	[M]
302	RML0516	PLUNGER LEVER	[M]
303	RMB0551	UPPER SPINDLE SPRING	[M]
304	RMQ0744	LOWER HOOK	[M]
305	RDV0056	BELT	[M]
306	RML0525	FRONT LOCK LEVER	[M]
307	RML0526	DISC LEVER	[M]
308	RDG0424	DRIVE GEAR	[M]
309	RDG0425	CHANGE GEAR	[M]
310	RDG0427	TRAVERSE CAM GEAR	[M]
311	RDG0428	TRAVERSE RELAY GEAR	[M]
312	RDG0426	UP/DOWN GEAR	[M]
313	RDG0429	PULLEY GEAR	[M]
314	RMB0549-1	CHANGE GEAR SPRING	[M]
315	RMQ0748	PITCH PLATE	[M]
316	RMB0553	PUSH SPRING	[M]
317	RML0530	ASSIST LEVER	[M]
318	RML0518	CONNECTION LEVER	[M]
319	RMM0201	SLIDE PLATE 1	[M]
320	RME0258	REAR LOCK SPRING	[M]
321	RML0521	REAR LOCK	[M]
322	RME0257	TRAY LOCK LEVER SPRING	[M]
323	RML0520	TRAY LOCK	[M]
324	RMM0202	SLIDE PLATE 2	[M]
325	XTB3+10J	SCREW	[M]
326	RMR0334	FIXED PLATE	[M]
327	RMR0624-W2	CLAMPER	[M]
328	RMB0561	ASSIST LEVER SPRING	[M]
329	RMR1121-K	MECHA COVER	[M]
330	RMA1110-2	TRAY ANGLE	[M]
331	RMR1122-H1	TRAY BASE	[M]
332	RMM0204	CARRIER	[M]
333	RMM0203	DRIVE RACK	[M]
334	RDG0432	SPEED UP GEAR	[M]
335	RML0524	SLIDE LOCK	[M]
336	RML0523	CARRIER LOCK	[M]
337	RME0260-1	SLIDE LOCK SPRING	[M]
338	RMR1123-H	TRAY	[M]
339	RXQ0595	MOTOR SUB ASS'Y	[M]
341	RSJ0003	SOLENOID ASS'Y	[M]
343	RMA1106	UPPER PLATE	[M]
344	RML0519	CD LEVER	[M]
345	RFKNAAK27GCS	MECHA BASE ASS'Y	[M]
346	RML0522	TURNING STOPPER	[M]
347	RMQ0745	LOWER SPINDLE	[M]
348	RMQ0746	UP/DOWN BASE	[M]
349	RMB0550	LOWER SPINDLE SPRING	[M]
350	RMQ0747	UPPER HOOK	[M]
351	RME0263	CLICK SPRING	[M]
352	RMQ0743	SPINDLE SHAFT	[M]
353	RMB0552	CUSHION SPRING	[M]
354	RDG0430	RELAY GEAR 'A'	[M]
355	RDG0431	RELAY GEAR 'B'	[M]
356	RME0262	DISK LEVER SPRING	[M]
357	RMA1105	SUPPORT PLATE	[M]
358	RAE0153Z-3S	TRAVERSE	[M]
358-1	SHGD113-1	FLOATING CUSHION	[M]
358-2	SNSD38	TRV MOTOR ASSY SCREW	[M]
358-3	RAF0152A-S	OPU UNIT	[M]
358-4	RDG0247	DRIVE GEAR	[M]
358-5	RDG0248	RELAY GEAR	[M]
358-6	RXQ0339	TRAVERSE MOTOR ASS'Y	[M]
358-7	RXQ0304-1	NUT PLATE ASS'Y	[M]
358-8	XQN17+CG5	NUT PLATE ASSY SCREW	[M]
358-9	XQS2+A3FZ	SPINDLE MOTOR SCREW	[M]
358-10	XQS17+A35FZ	TRAVERSE MOTOR SCREW	[M]
359	RME0142	FLOATING SPRING A	[M]
360	RME0109	FLOATING SPRING B	[M]
361	RMR1124A-X	CD TRAVERSE CHASSIS	[M]
362	RMS0632	TRAVERSE PIN	[M]
363	XTN2+6G	SCREW	[M]
369	RMX0141	PUSH SPACER	[M]
370	RMQ0749	UPPER SPINDLE	[M]
371	RHM0001	MAGNET	[M]
372	RMX0140	DISC SPACER	[M]
373	RME0261	FRONT LOCK SPRING	[M]
374	RMQ0742	SPINDLE BASE	[M]

23.3.1 Cabinet Parts Location

23.3.1 Cabinet Parts Location




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(MAIN P.C.B)
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JK5950
T5950
CN2805
35
4(To CN01)
35
JK2601
CN2801
6
(To CN7002)
21
(TUNER PACK
P.C.B)
33
CN5951
JK2801
JK5952
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CN5950
CN2806
33
CN5800
(TRANSFORMER P.C.B)
CN5801
CN2803
CN2809
H5950/
W5950
22
CN2808
E5800
(POWER P.C.B)
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23.3.2 Cabinet Parts List

Ref. No	Part No.	Part Name/ Description	
1	L6FALEFH0030	VENTILADOR	
2	REEX0352	SPEAKER CORD(RED/BLACK)	
3	REEX0352	SPEAKER CORD(RED/BLACK)	
4	REEX0212-1	MULTICABLE	
5	REEX0447	MULTICABLE	
6	REEX0202-2	MULTICABLE	
7	REEX0211	14P FFC WIRE (CHANGER TO MAIN)	
07-gen	REEX0401	30 PIN MULTICABLE	
8	RYPM0183	CONJUNTO FRONT PANEL	
9	RKWX0239A-H	FL WINDOW	
10	RGRX0042G-L	TAPA POSTERIO TM23	
11	RGUX0593-S	BOTONERA FUNCION	
12	RGUX0594-S	POWER/SSEQ BTN	
13	RGUX0595-S	CD EJECT BTN/CONTROL BTN	
14	RGWX0088-S	VOLUME KNOB	
15	RHD30004-2S	SIDE SCREW	
16	RKA0072-KJ	LEG	
17	RKFX0125	CASS LID (L)	
18	RKFX0126	CASS LID(R)	
19	RKMX0105Z-SL1	TOP CABINET SIN DOBLAR	
20	RMBX0036	CASS OPEN SPRING	
21	RMCX0021	TRANSISTOR CLIP	
22	RMKX0099-LM1	BOTTOM CHASSIS 23/43/53	
23	RMKX0100-SL	CD CHASSIS	
24	RMNX0119-K	FL HOLDER SC-TM22	
25	RGWX0088-S	VOLUME KNOB	
26	RUS757ZAA	RESORTE CASSETTE	
27	RXGX0002	DAMPER GEAR	
28	RXXX0057A	DISIPADOR DEL TM23	
29	RYPM0177	CD LID ACABADO	
30	XTB3+10J-A	TORNILLO	
31	XTB3+10JFZ-A	TORNILLO	
32	XTBS26+10J-A	TORNILLO	
33	XTBS3+8JFZ1-A	TORNILLO	
34	XTW3+12T-A	TORNILLO MECANISMO CD	
35	XTW3+15T-A	TORNILLO PARA INTEGRADO	

Ref. No.	Part No.	Part Name & Description
	REPM05230A	CONJUNTO MANUAL TRANSFORMADOR SC-TM23
	RENM05230A	CONJUNTO RADIAL TRANSFORMADOR SC-TM23
	RENM05230AZ	CONJUNTO AXIAL TRANSFORMADOR SC-TM23
	RENM05230AJ	CONJUNTO JUMPER TRANSFORMADOR SC-TM23
	REPM05231A	CONJUNTO MANUAL PODER SC-TM23
	RENM05231A	CONJUNTO RADIAL PODER SC-TM23
	RENM05231AZ	CONJUNTO AXIAL PODER SC-TM23
	RENM05231AJ	CONJUNTO JUMPER PODER SC-TM23
	REPM05232A	CONJUNTO MANUAL MAIN SC-TM23
	REAM05232A	CONJUNTO SMT MAIN SC-TM23
	RENM05232A	CONJUNTO RADIAL MAIN SC-TM23
	RENM05232AZ	CONJUNTO AXIAL MAIN SC-TM23
	RENM05232AJ	CONJUNTO JUMPER MAIN SC-TM23
	RENM03815A	CONJUNTO TUNER PACK RADIAL
	RENM03815AZ	CONJUNTO TUNER PACK AXIAL
	RENM03815AJ	CONJUNTO TUNER PACK JUMPER
	REPM05233A	CONJUNTO MANUAL PANEL SC-TM23
	RENM05233A	CONJUNTO RADIAL PANEL SC-TM23
	RENM05233AZ	CONJUNTO AXIAL PANEL SC-TM23
	RENM05233AJ	CONJUNTO JUMPER PANEL SC-TM23

CAPACITORS

C5961	ECA1AM471B	CAPACITOR ELECTROLITICO
C5962	ECA1AM471B	CAPACITOR ELECTROLITICO
C5957	ECA1HM100B	C.ELECTROLITICO
C5956	F2A1H470A147	CAPACITOR
C5952	F2A1A470A011	CAPACITOR
C5963	ECEA1VKA4R7B	CAPACITOR ELECTROLITICO
C5951	F1B1H1030003	CAPACITOR
C5954	F1B1H1030003	CAPACITOR
C5959	F1B1H1030003	CAPACITOR
C5960	ECQE2104KF3	CAPACITOR PP
C5958	F1B1H1030003	CAPACITOR
C5953	F1B1H1030003	CAPACITOR
C5955	ECA1HM220B	C.ELECTROLITICO
C5950	ECA1EM222B	CAPACITOR
C5810	F2A1E101A122	CAPACITOR
C5807	F2A1C100A196	CAPACITOR
C5808	F2A1C100A196	CAPACITOR
C5813	ECEA1EKA100B	CAPACITOR ELECTROLITICO
C5812	ECEA1EKA330B	CAPACITOR ELECTROLITICO
C5803	F1D1H101A012	CAPACITOR CERAMICO
C5501	F1D1H103A046	CAPACITOR
C5243	ECBT1H150J5	CAPACITOR
C5441	ECBT1H150J5	CAPACITOR

C5442	F1D1H471A012	CAPACITOR CERAMICO
C5240	F1D1H471A012	CAPACITOR CERAMICO
C5440	F1D1H821A012	CAPACITOR CERAMICO
C5242	F1D1H821A012	CAPACITOR CERAMICO
C5814	F1D1H103A046	CAPACITOR
C5811	F1D1H103A046	CAPACITOR
C5809	F1D1H103A046	CAPACITOR
C5806	F1D1H103A046	CAPACITOR
C5804	F1D1H103A046	CAPACITOR
C5814	F1D1H103A046	CAPACITOR
C5811	F1D1H103A046	CAPACITOR
C5809	F1D1H103A046	CAPACITOR
C5806	F1D1H103A046	CAPACITOR
C5804	F1D1H103A046	CAPACITOR
C5846	F1D1H1040002	CAPACITOR
C5447	F1D1H1040002	CAPACITOR
C5444	F1D1H1040002	CAPACITOR
C5244	F1D1H1040002	CAPACITOR
C5805	ECA1CM101B	CAPACITOR
C5521	ECA2AM100B	CAPACITOR ELECTROLITICO
C5443	ECA2AM100B	CAPACITOR ELECTROLITICO
C5547	F2A1H1R0A015	CAPACITOR
C5545	F2A1H1R0A015	CAPACITOR
C5802	ECA0JAK221XB	CAPACITOR ELECTROLITICO
C5838	F2A1H2R2A015	CAPACITOR
C5838	F2A1H2R2A015	CAPACITOR
C5840	ECA1HM222B	CAPACITOR
C5820	ECA1HM222B	CAPACITOR
C2412	ECJ1VB1A154K	CAPACITOR CHIP
C2312	ECJ1VB1A154K	CAPACITOR CHIP
C2218	ECJ1VB1C104K	CAPACITOR
C2102	ECJ1VB1C104K	CAPACITOR
C2107	ECJ1VB1C104K	CAPACITOR
C2111	ECJ1VB1C104K	CAPACITOR
C2118	ECJ1VB1C104K	CAPACITOR
C2121	ECJ1VB1C104K	CAPACITOR
C2202	ECJ1VB1C104K	CAPACITOR
C2207	ECJ1VB1C104K	CAPACITOR
C2211	ECJ1VB1C104K	CAPACITOR
C2221	ECJ1VB1C104K	CAPACITOR
C2226	ECJ1VB1C104K	CAPACITOR
C2231	ECJ1VB1C104K	CAPACITOR
C2236	ECJ1VB1C104K	CAPACITOR
C2588	ECJ1VB1C104K	CAPACITOR
C2751	ECJ1VB1C104K	CAPACITOR
C2753	ECJ1VB1C104K	CAPACITOR
C2851	ECJ1VB1C104K	CAPACITOR

C2853	ECJ1VB1C104K	CAPACITOR
C2901	ECJ1VB1C104K	CAPACITOR
C2998	ECJ1VB1C104K	CAPACITOR
C2831	ECJ1VB1C223K	CAPACITOR
C2583	ECJ1VB1C224K	CHIP CAPACITOR
C2616	ECJ1VB1C333K	CAPACITOR CHIP
C2607	ECJ1VB1E473K	CAPACITOR CHIP
C2208	ECJ1VB1H102K	CHIP CAPACITOR
C2203	ECJ1VB1H102K	CHIP CAPACITOR
C2166	ECJ1VB1H102K	CHIP CAPACITOR
C2119	ECJ1VB1H102K	CHIP CAPACITOR
C2108	ECJ1VB1H102K	CHIP CAPACITOR
C2103	ECJ1VB1H102K	CHIP CAPACITOR
C2219	ECJ1VB1H102K	CHIP CAPACITOR
C2906	ECJ1VB1H102K	CHIP CAPACITOR
C2647	ECJ1VB1H102K	CHIP CAPACITOR
C2636	ECJ1VB1H102K	CHIP CAPACITOR
C2632	ECJ1VB1H102K	CHIP CAPACITOR
C2613	ECJ1VB1H102K	CHIP CAPACITOR
C2609	ECJ1VB1H102K	CHIP CAPACITOR
C2604	ECJ1VB1H102K	CHIP CAPACITOR
C2266	ECJ1VB1H102K	CHIP CAPACITOR
C2610	ECJ1VB1H103K	CHIP CAPACITOR
C2114	ECJ1VB1H103K	CHIP CAPACITOR
C2214	ECJ1VB1H103K	CHIP CAPACITOR
C2520	ECJ1VB1H103K	CHIP CAPACITOR
C2521	ECJ1VB1H103K	CHIP CAPACITOR
C2601	ECJ1VB1H103K	CHIP CAPACITOR
C2603	ECJ1VB1H103K	CHIP CAPACITOR
C2606	ECJ1VB1H103K	CHIP CAPACITOR
C2612	ECJ1VB1H103K	CHIP CAPACITOR
C2617	ECJ1VB1H103K	CHIP CAPACITOR
C2618	ECJ1VB1H103K	CHIP CAPACITOR
C2638	ECJ1VB1H103K	CHIP CAPACITOR
C2648	ECJ1VB1H103K	CHIP CAPACITOR
C2903	ECJ1VB1H103K	CHIP CAPACITOR
C2951	ECJ1VB1H103K	CHIP CAPACITOR
C2952	ECJ1VB1H103K	CHIP CAPACITOR
C2584	ECJ1VB1H221K	CHIP CAPACITOR
C2585	ECJ1VB1H221K	CHIP CAPACITOR
C2832	ECJ1VB1H331K	CHIP CAPACITOR
C2833	ECJ1VB1H331K	CHIP CAPACITOR
C2106	ECJ1VB1H332K	CHIP CAPACITOR
C2637	ECJ1VB1H332K	CHIP CAPACITOR
C2206	ECJ1VB1H332K	CHIP CAPACITOR
C2907	ECJ1VB1H471K	CHIP CAPACITOR
C2116	ECJ1VB1H681K	CHIP CAPACITOR

C2216	ECJ1VB1H681K	CHIP CAPACITOR
C2608	ECJ1VC1H080D	CHIP CAPACITOR
C2401	ECJ1VC1H100J	CHIP CAPACITOR
C2301	ECJ1VC1H100J	CHIP CAPACITOR
C2631	ECJ1VC1H151J	CHIP CAPACITOR
C2840	ECJ1VC1H180J	CHIP CAPACITOR
C2841	ECJ1VC1H180J	CHIP CAPACITOR
C2302	ECJ1VC1H470J	CAPACITOR
C2402	ECJ1VC1H470J	CAPACITOR
C2649	ECJ1VF1C104Z	CHIP CAPACITOR
C2936	ECJ1VF1C474Z	CAPACITOR
C2501	ECEA1HKN2R2B	CAPACITOR
C2977	ECA1CM101B	CAPACITOR
C2582	ECA1CM101B	CAPACITOR
C2602	F2A1C100A196	CAPACITOR
C2611	F2A1H4R70009	CAPACITOR
C2614	F2A1H3R3A015	CAPACITOR
C2615	F2A1H4R70009	CAPACITOR
C2620	F2A1C100A196	CAPACITOR
C2621	F2A1HR47A015	CAPACITOR
C2622	F2A1H1R0A015	CAPACITOR
C2581	ECA1CAK330XB	CAPACITOR ELECTROLITICO
C2623	F2A1H1R0A015	CAPACITOR
C2625	F2A1C220A017	CAPACITOR
C2627	F2A1C220A017	CAPACITOR
C2639	F2A1H4R70009	CAPACITOR
C2641	F2A1H1R0A015	CAPACITOR
C2642	F2A1H1R0A015	CAPACITOR
C2852	ECA1CM101B	CAPACITOR
C2854	ECA1CM101B	CAPACITOR
C2857	F2A1H2R2A015	CAPACITOR
C2904	ECA1CM101B	CAPACITOR
C2905	ECA1CM101B	CAPACITOR
C2619	F0A2A681A010	POLYPROPLYENE CAPACITOR
C2151	ECA1CM100B	C.ELECTROLITICO
C2245	ECA1CM100B	C.ELECTROLITICO
C2251	ECA1CM100B	C.ELECTROLITICO
C2902	ECA1CM100B	C.ELECTROLITICO
C2976	ECA1CM100B	C.ELECTROLITICO
C2629	ECA1CAK101XB	CAPACITOR ELECTROLITICO
C2630	ECA1CAK101XB	CAPACITOR ELECTROLITICO
C2707	ECEA1AKN100B	CAPACITOR
C2708	ECA1CM101B	CAPACITOR
C2705	ECA1CAK100XB	CAPACITOR ELECTROLITICO
C2212	ECJ1VB1H152K	CAPACITOR
C2112	ECJ1VB1H152K	CAPACITOR
C2634	ECJ1VC1H120J	CAPACITOR CHIP

C2633	ECJ1VC1H120J	CAPACITOR CHIP
C2999	ECJ1VB1C104K	CAPACITOR
C2136	ECJ1VB1C224K	CHIP CAPACITOR
C2131	ECJ1VB1C224K	CHIP CAPACITOR
C2126	ECJ1VB1C104K	CAPACITOR
C2136	ECJ1VB1C224K	CHIP CAPACITOR
C2284	ECJ1VB1H222K	CHIP CAPACITOR
C2701	ECJ1VB1H103K	CHIP CAPACITOR
C2706	ECJ1VB1H103K	CHIP CAPACITOR
C10	F1D1H180A015	CAPACITOR
C4	F1D1H181A012	CAPACITOR
C3	F1D1H2R2A017	CAPACITOR
C9	F1D1H2R2A017	CAPACITOR
C6	F1D1H3R3A017	CAPACITOR
C8	F1D1H3R3A017	CAPACITOR
C7	F1D1H4R7A017	CAPACITOR
C1	F1D1H5R6A017	CAPACITOR
C5	F1D1H5R6A017	CAPACITOR
C11	F1D1H102A029	CAPACITOR
C2	F1D1H102A029	CAPACITOR
C6481	F2A0J470A014	CAPACITOR
C6623	F2A0J470A014	CAPACITOR
C6635	F2A1H3R3A015	CAPACITOR
C6632	ECEA1VKA220B	CAPACITOR
C6553	F1D1E103A001	CAPACITOR
C6552	F1D1E103A001	CAPACITOR
C6551	F1D1E103A001	CAPACITOR
C6491	F1D1H101A012	CAPACITOR CERAMICO
C6492	F1D1H101A012	CAPACITOR CERAMICO
C6603	F1D1H101A012	CAPACITOR CERAMICO
C6604	F1D1H101A012	CAPACITOR CERAMICO
C6621	F1D1H101A012	CAPACITOR CERAMICO
C6636	F1D1H101A012	CAPACITOR CERAMICO
C6601	F1D1H101A012	CAPACITOR CERAMICO
C6602	F1D1H101A012	CAPACITOR CERAMICO
C6612	ECBT1H270J5	CAPACITOR
C6631	ECEA1VKA220B	CAPACITOR
C2411	ECJ1VB1A184K	CHIP CAPACITOR
C2311	ECJ1VB1A184K	CHIP CAPACITOR

CERAMIC FILTERS

CF2601	J0B1075A0061	CRISTAL CERAMICO
CF2602	J0B1075A0061	CRISTAL CERAMICO

CONNECTORS

CN2806	K1MN30A00046	CONECTOR 30P
CN2803	RJS1A9414-1	CONECTOR FFC 14P
CN2805	RJS1A9414-1	CONECTOR FFC 14P
CN2801	RJS1A9416-1	CONECTOR 16P
CN6601	K1MN30A00046	CONECTOR 30P
JK6551	K2HC103A0023	CONECTOR DE BAFLES
CN5951	K1KA09A00150	9P PLUG IN CONECTOR
CN5950	K1KA09A00227	9P CONNECTOR
CN5800	K1KA12A00184	P2 MQ CONNECTOR (12P)
CN5801	K1KA12A00184	P2 MQ CONNECTOR (12P)
CN2810	K1KA02A00008	CONNECTOR
CN2808	K1KB12B00036	P2 MO CONNECTOR (12 LOC)
CN2809	K1KB12B00036	P2 MO CONNECTOR (12 LOC)
CP6401	K1MN10B00104	10P FFC CONNECTOR

DIODES

D5950	B0EAMM000038	DIODO RECTIFICADOR
D5951	B0EAMM000038	DIODO RECTIFICADOR
D5952	B0EAMM000038	DIODO RECTIFICADOR
D5953	B0EAMM000038	DIODO RECTIFICADOR
D5954	B0EAKM000117	DIODO
D5955	B0EAKM000117	DIODO
D5956	B0EAKM000117	DIODO
D5957	B0EAKM000117	DIODO
D5958	B0EAKM000117	DIODO
D5959	B0EAKM000117	DIODO
D5960	MAZ42700LF	DIODO
D5961	B0EAKM000117	DIODO
D5962	B0EAKM000117	DIODO
D5963	B0EAKM000117	DIODO
D5966	B0EAKM000117	DIODO
D5805	B0EAKM000117	DIODO
D5807	B0EAKM000117	DIODO
D2904	B0EAKM000117	DIODO
D2936	B0EAKM000117	DIODO
D1	SVC211SPA-AL	DIODO
D2	SVC211SPA-AL	DIODO
D3	SVC211SPA-AL	DIODO
D6635	B0BA5R600016	ZENER DIODE
D5965	B0AACK000004	DIODE
D5964	B0BA6R600008	ZENER DIODE
D5804	B0AACK000004	DIODE
D5813	B0AACK000004	DIODE
D5802	B0BA01500003	ZENER DIODE
D5803	B0BA01500003	ZENER DIODE
D5808	B0BA5R600016	ZENER DIODE

D5809	B0BA9R600002	ZENER DIODE
D5801	B0BA9R600002	ZENER DIODE
D5814	B0AACK000004	DIODE
D5814	B0AACK000004	DIODE
D2241	B0ACCK000005	CHIP DIODE
D2804	B0ACCK000005	CHIP DIODE
D2813	B0ACCK000005	CHIP DIODE
D2901	B0ADCC000002	DUAL CHIP DIODE
D2811	B0ADCJ000020	DUAL CHIP DIODE
D2802	B0ADCJ000020	DUAL CHIP DIODE
D2601	B0BC5R000009	CHIP ZENER DIODE
D2951	B0BC7R500001	CHIP DIODE
D2602	B0CDBB000015	CHIP DIODE
D2703	B0ACCK000005	CHIP DIODE
D2704	B0ACCK000005	CHIP DIODE
D2705	B0ACCK000005	CHIP DIODE

EARTH TERMINAL

E5800	SNE1004-2	TERMINAL DE TIERRA

FUSE

FC1	K3GE1BA00021	RESISTENCIA FUSIBLE
FC2	K3GE1BA00021	RESISTENCIA FUSIBLE
FP5833	K5G401A00008	FUSIBLE
FP5951	K5G102A00039	FUSIBLE
FP5950	K5G402A00025	FUSIBLE

DISPLAY TUBE

FL6601	A2BD00000111	FL DISPLAY FOR TM23

HOLDERS

	RMNX0119-K	FL HOLDER SC-TM22
H5950	RJS1A5509	AP WIRE HOLDER
H6555	K1YZ09000002	JACK

INTEGRATED CIRCUITS

IC6601	C0HBB0000044	48P QFP FL DRIVER IC
IC5802	RSN35H2B-P	HIC
IC2804	C0AABA000009	AMPLIFICADOR OPERACIONAL
IC2803	C1BB00000732	ASP IC
IC2802	C3EBDG000052	IC
IC2601	C1BB00000962	IC PREAMPLIFICADOR
IC2602	C1CB00001937	IC PLL
IC2801	C2CBJG000565	MICRO P. FOR TM23

JACKS

JK5950	K2AA2B000004	AC IN
JK5952	K4BC04B00046	4 TERMINAL SPEAKER JACK
JK2601	K4BC03A00009	ANTENNA JACK
JK2801	K2HA204B0153	2 PIN RCA JACK

COILS/ TRANSFORMERS

L1	RLQZP1R2KT-Y	BOBINA AXIAL
L2	RLQZPR47KT-Y	BOBINA AXIAL
L2602	G2BPC0000016	OSCILLATOR COIL
L2601	GNS-A0882DC	BOBINA AM
L2996	ERJ3GEY0R00V	CHIP JUMPER
L2580	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
L2801	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
L2901	W6NL-0	ALAMBRE DESNUDO ESTA?ADO

TRANSISTORS

Q5951	2SB0621AHA	TRANSISTOR
Q2701	2SD0592ARA	TRANSISTOR
Q2704	2SB0709AHL	TRANSISTOR CHIP
Q2705	2SB0709AHL	TRANSISTOR CHIP
Q2706	2SD0601AHL	TRANSISTOR CHIP
Q2	2SC2786MTA	TRANSISTOR
Q3	2SC2787FL1TA	TRANSISTOR
Q4	2SC2787FL1TA	TRANSISTOR
Q1	2SK544F-AC	TRANSISTOR
Q5953	B1AACF000064	TRANSISTOR
Q5950	B1BACD000017	TRANSISTOR RADIAL
Q5952	B1GACFJJ0016	TRANSISTOR
Q5801	B1BACG000023	TRANSISTOR
Q5803	B1BACG000023	TRANSISTOR
Q5802	B1BCCG000002	TRANSISTOR
Q5804	B1BCCG000002	TRANSISTOR
Q5812	B1AACF000064	TRANSISTOR
Q5813	B1AACF000064	TRANSISTOR
Q5814	B1AACF000064	TRANSISTOR
Q5807	B1AACF000064	TRANSISTOR
Q5808	B1AAKD000009	TRANSISTOR
Q5805	B1ACCF000063	TRANSISTOR RADIAL
Q5806	B1GCCFGA0005	TRANSISTORRADIAL
Q2142	B1ABCF000131	TRANSISTOR CHIP
Q2242	B1ABCF000131	TRANSISTOR CHIP
Q2906	B1ABCF000131	TRANSISTOR CHIP
Q2907	B1ABCF000131	TRANSISTOR CHIP

Q2806	B1GBCFJJ0039	TRANSISTORCHIP
Q2937	B1GBCFJJ0039	TRANSISTORCHIP
Q2501	B1GDCFJJ0023	TRANSISTOR
Q2978	B1GDCFJJ0023	TRANSISTOR
Q2980	B1GDCFJJ0023	TRANSISTOR
Q2571	B1GFGCAA0001	CHIP TRANSISTOR
Q2601	B1AABC000003	TRANSISTOR
Q2606	B1GCCFJJ0015	TRANSISTOR RADIAL
Q2901	B1ACKD000004	TRANSISTOR
Q2902	B1AACF000064	TRANSISTOR
Q2936	B1ACKD000004	TRANSISTOR
Q6415	B1ACKD000004	TRANSISTOR
Q6411	B1ACKD000004	TRANSISTOR
Q6425	B1GACFLL0007	TRANSISTOR
Q6421	B1GACFLL0007	TRANSISTOR
Q6457	B1GACFLL0007	TRANSISTOR

RESISTORS

C2643	ECJ1VB1H682K	CHIP RESISTOR
C2644	ECJ1VB1H682K	CHIP RESISTOR
C2813	ECJ1VC1H101K	CHIP RESISTOR
C2812	ECJ1VC1H101K	CHIP RESISTOR
C2811	ECJ1VC1H101K	CHIP RESISTOR
C2624	ECJ1VC1H101K	CHIP RESISTOR
C2217	ECJ1VC1H101K	CHIP RESISTOR
C2117	ECJ1VC1H101K	CHIP RESISTOR
C2184	F1H1H222A013	CHIP RESISTOR
C2814	ECJ1VC1H101K	CHIP RESISTOR
C2819	ECJ1VC1H101K	CHIP RESISTOR
C2820	ECJ1VC1H101K	CHIP RESISTOR
C2821	ECJ1VC1H101K	CHIP RESISTOR
C2818	ECJ1VC1H101K	CHIP RESISTOR
C2817	ECJ1VC1H101K	CHIP RESISTOR
C2816	ECJ1VC1H101K	CHIP RESISTOR
C2815	ECJ1VC1H101K	CHIP RESISTOR
R5954	ERDS1FVJ100T	RESISTENCIA RADIAL
R5955	ERDS1FVJ100T	RESISTENCIA RADIAL
R5956	ERDS1FVJ100T	RESISTENCIA RADIAL
R5957	ERDS2TJ103T	RESISTENCIA
R5958	ERDS2TJ103T	RESISTENCIA
R5953	ERDS2TJ151T	RESISTENCIA
R5961	ERDS2TJ151T	RESISTENCIA
R5951	ERDS2TJ332T	RESISTENCIA CARBON
R5960	ERDS2TJ472T	RESISTENCIA CARBON
R5965	ERDS2TJ123T	RESISTENCIA
R5816	ERDS1FVJ150T	RESISTENCIA

R5834	ERDS1FVJ270T	RESISTENCIA
R5807	ERDS1FVJ271T	RESISTENCIA
R5808	ERDS1FVJ271T	RESISTENCIA
R5829	ERDS1FVJ331T	RESISTENCIA RADIAL
R5809	ERDS1FVJ391T	RESISTENCIA
R5818	ERDS1FVJ8R2T	RESISTENCIA
R5819	ERDS1FVJ8R2T	RESISTENCIA
R5820	ERDS1FVJ8R2T	RESISTENCIA
R5821	ERDS1FVJ8R2T	RESISTENCIA
R5858	ERDS1FVJ8R2T	RESISTENCIA
R5801	ERDS2TJ103T	RESISTENCIA
R5828	ERDS2TJ103T	RESISTENCIA
R5806	ERDS2TJ104T	RESISTENCIA
R5830	ERDS2TJ122T	R.CARBON
R5832	ERDS2TJ151T	RESISTENCIA
R5446	ERDS2TJ153T	RESISTENCIA
R5246	ERDS2TJ153T	RESISTENCIA
R5251	ERDS2TJ154T	R.CARBON
R5451	ERDS2TJ154T	R.CARBON
R5831	ERDS2TJ222T	R.CARBON
R5802	ERDS2TJ223T	RESISTENCIA
R5812	ERDS2TJ272T	RESISTENCIA CARBON
R5810	ERDS2TJ272T	RESISTENCIA CARBON
R5827	ERDS2TJ2R2T	RESISTENCIA
R5826	ERDS2TJ2R2T	RESISTENCIA
R5825	ERDS2TJ2R2T	RESISTENCIA
R5824	ERDS2TJ2R2T	RESISTENCIA
R5813	ERDS2TJ332T	RESISTENCIA CARBON
R5814	ERDS2TJ332T	RESISTENCIA CARBON
R5822	ERDS2TJ332T	RESISTENCIA CARBON
R5450	ERDS2TJ334T	RESISTENCIA CARBON
R5811	ERDS2TJ471T	R.CARBON
R5823	ERDS2TJ471T	R.CARBON
R5804	ERDS2TJ473T	RESISTENCIA CARBON
R5805	ERDS2TJ473T	RESISTENCIA CARBON
R5242	ERDS2TJ562T	R.CARBON
R5245	ERDS2TJ562T	R.CARBON
R5445	ERDS2TJ562T	R.CARBON
R5447	ERDS2TJ562T	R.CARBON
R5545	ERDS2TJ563T	RESISTENCIA CARBON
R5546	ERDS2TJ563T	RESISTENCIA CARBON
R5250	ERDS2TJ683T	R.CARBON
R5449	ERDS2TJ683T	R.CARBON
R5853	ERDS2TJ224T	RESISTENCIA
R5854	ERDS2TJ223T	RESISTENCIA
R5856	ERDS2TJ223T	RESISTENCIA
R5847	ERDS1FVJ220T	RESISTENCIA

R5855	ERDS1FVJ100T	RESISTENCIA RADIAL
R5455	ERDS1FVJ100T	RESISTENCIA RADIAL
R5854	ERDS2TJ223T	RESISTENCIA
R5856	ERDS2TJ223T	RESISTENCIA
R5853	ERDS2TJ224T	RESISTENCIA
R2802	ERJ3GEYJ101V	RESISTENCIA CHIP PEL?CULA
R2856	ERJ3GEYJ101V	RESISTENCIA CHIP PEL?CULA
R2857	ERJ3GEYJ101V	RESISTENCIA CHIP PEL?CULA
R2858	ERJ3GEYJ101V	RESISTENCIA CHIP PEL?CULA
R2859	ERJ3GEYJ101V	RESISTENCIA CHIP PEL?CULA
R2206	ERJ3GEYJ101V	RESISTENCIA CHIP PEL?CULA
R2106	ERJ3GEYJ101V	RESISTENCIA CHIP PEL?CULA
R2860	ERJ3GEYJ101V	RESISTENCIA CHIP PEL?CULA
R2861	ERJ3GEYJ101V	RESISTENCIA CHIP PEL?CULA
R2862	ERJ3GEYJ101V	RESISTENCIA CHIP PEL?CULA
R2633	ERJ3GEYJ102V	RESISTENCIA CHIP PEL?CULA
R2626	ERJ3GEYJ102V	RESISTENCIA CHIP PEL?CULA
R2616	ERJ3GEYJ102V	RESISTENCIA CHIP PEL?CULA
R2610	ERJ3GEYJ102V	RESISTENCIA CHIP PEL?CULA
R2604	ERJ3GEYJ102V	RESISTENCIA CHIP PEL?CULA
R2246	ERJ3GEYJ102V	RESISTENCIA CHIP PEL?CULA
R2146	ERJ3GEYJ102V	RESISTENCIA CHIP PEL?CULA
R2635	ERJ3GEYJ102V	RESISTENCIA CHIP PEL?CULA
R2636	ERJ3GEYJ102V	RESISTENCIA CHIP PEL?CULA
R2637	ERJ3GEYJ102V	RESISTENCIA CHIP PEL?CULA
R2834	ERJ3GEYJ102V	RESISTENCIA CHIP PEL?CULA
R2843	ERJ3GEYJ102V	RESISTENCIA CHIP PEL?CULA
R2907	ERJ3GEYJ102V	RESISTENCIA CHIP PEL?CULA
R2936	ERJ3GEYJ102V	RESISTENCIA CHIP PEL?CULA
R2613	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2630	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2632	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2801	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2803	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2806	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2807	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2841	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2842	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2844	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2845	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2211	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2930	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2929	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2928	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2924	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2922	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2918	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA

R2901	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2931	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2937	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2943	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2944	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2953	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2111	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2143	ERJ3GEYJ104V	RESISTENCIA CHIP PEL?CULA
R2154	ERJ3GEYJ104V	RESISTENCIA CHIP PEL?CULA
R2243	ERJ3GEYJ104V	RESISTENCIA CHIP PEL?CULA
R2247	ERJ3GEYJ104V	RESISTENCIA CHIP PEL?CULA
R2254	ERJ3GEYJ104V	RESISTENCIA CHIP PEL?CULA
R2612	ERJ3GEYJ104V	RESISTENCIA CHIP PEL?CULA
R2645	ERJ3GEYJ104V	RESISTENCIA CHIP PEL?CULA
R2646	ERJ3GEYJ104V	RESISTENCIA CHIP PEL?CULA
R2817	ERJ3GEYJ104V	RESISTENCIA CHIP PEL?CULA
R2417	ERJ3GEYJ104V	RESISTENCIA CHIP PEL?CULA
R2818	ERJ3GEYJ104V	RESISTENCIA CHIP PEL?CULA
R2819	ERJ3GEYJ104V	RESISTENCIA CHIP PEL?CULA
R2820	ERJ3GEYJ104V	RESISTENCIA CHIP PEL?CULA
R2821	ERJ3GEYJ104V	RESISTENCIA CHIP PEL?CULA
R2822	ERJ3GEYJ104V	RESISTENCIA CHIP PEL?CULA
R2823	ERJ3GEYJ104V	RESISTENCIA CHIP PEL?CULA
R2824	ERJ3GEYJ104V	RESISTENCIA CHIP PEL?CULA
R2867	ERJ3GEYJ104V	RESISTENCIA CHIP PEL?CULA
R2317	ERJ3GEYJ104V	RESISTENCIA CHIP PEL?CULA
R2886	ERJ3GEYJ105V	RESISTENCIA CHIP
R2882	ERJ3GEYJ106V	CHIP RESISTOR
R2644	ERJ3GEYJ121V	RESISTENCIA CHIP
R2631	ERJ3GEYJ121V	RESISTENCIA CHIP
R2586	ERJ3GEYJ122V	RESISTENCIA CHIP PEL?CULA
R2587	ERJ3GEYJ122V	RESISTENCIA CHIP PEL?CULA
R2101	ERJ3GEYJ122V	RESISTENCIA CHIP PEL?CULA
R2201	ERJ3GEYJ122V	RESISTENCIA CHIP PEL?CULA
R2116	ERJ3GEYJ123V	RESISTENCIA CHIP PEL?CULA
R2216	ERJ3GEYJ123V	RESISTENCIA CHIP PEL?CULA
R2938	ERJ3GEYJ123V	RESISTENCIA CHIP PEL?CULA
R2941	ERJ3GEYJ123V	RESISTENCIA CHIP PEL?CULA
R2102	ERJ3GEYJ182V	RESISTENCIA CHIP PEL?CULA
R2202	ERJ3GEYJ182V	RESISTENCIA CHIP PEL?CULA
R2270	ERJ3GEYJ1R0V	RESISTENCIA CHIP PEL?CULA
R2170	ERJ3GEYJ1R0V	RESISTENCIA CHIP PEL?CULA
R2940	ERJ3GEYJ221V	RESISTENCIA CHIP PEL?CULA
R2881	ERJ3GEYJ221V	RESISTENCIA CHIP PEL?CULA
R2571	ERJ3GEYJ222V	RESISTENCIA CHIP PEL?CULA
R2149	ERJ3GEYJ222V	RESISTENCIA CHIP PEL?CULA
R2909	ERJ3GEYJ222V	RESISTENCIA CHIP PEL?CULA

R2501	ERJ3GEYJ222V	RESISTENCIA CHIP PEL?CULA
R2249	ERJ3GEYJ222V	RESISTENCIA CHIP PEL?CULA
R2621	ERJ3GEYJ223V	RESISTENCIA CHIP PEL?CULA
R2643	ERJ3GEYJ223V	RESISTENCIA CHIP PEL?CULA
R2810	ERJ3GEYJ223V	RESISTENCIA CHIP PEL?CULA
R2876	ERJ3GEYJ223V	RESISTENCIA CHIP PEL?CULA
R2877	ERJ3GEYJ223V	RESISTENCIA CHIP PEL?CULA
R2939	ERJ3GEYJ223V	RESISTENCIA CHIP PEL?CULA
R2942	ERJ3GEYJ223V	RESISTENCIA CHIP PEL?CULA
R2112	ERJ3GEYJ223V	RESISTENCIA CHIP PEL?CULA
R2212	ERJ3GEYJ223V	RESISTENCIA CHIP PEL?CULA
R2603	ERJ3GEYJ271V	RESISTENCIA CHIP PEL?CULA
R2141	ERJ3GEYJ272V	RESISTENCIA CHIP PEL?CULA
R2241	ERJ3GEYJ272V	RESISTENCIA CHIP PEL?CULA
R2622	ERJ3GEYJ272V	RESISTENCIA CHIP PEL?CULA
R2117	ERJ3GEYJ272V	RESISTENCIA CHIP PEL?CULA
R2217	ERJ3GEYJ272V	RESISTENCIA CHIP PEL?CULA
R2318	ERJ3GEYJ272V	RESISTENCIA CHIP PEL?CULA
R2418	ERJ3GEYJ272V	RESISTENCIA CHIP PEL?CULA
R2629	ERJ3GEYJ273V	RESISTENCIA CHIP PEL?CULA
R2166	ERJ3GEYJ330V	RESISTENCIA CHIP
R2167	ERJ3GEYJ330V	RESISTENCIA CHIP
R2168	ERJ3GEYJ330V	RESISTENCIA CHIP
R2169	ERJ3GEYJ330V	RESISTENCIA CHIP
R2266	ERJ3GEYJ330V	RESISTENCIA CHIP
R2267	ERJ3GEYJ330V	RESISTENCIA CHIP
R2268	ERJ3GEYJ330V	RESISTENCIA CHIP
R2269	ERJ3GEYJ330V	RESISTENCIA CHIP
R2624	ERJ3GEYJ330V	RESISTENCIA CHIP
R2910	ERJ3GEYJ331V	RESISTENCIA CHIP PEL?CULA
R2607	ERJ3GEYJ331V	RESISTENCIA CHIP PEL?CULA
R2638	ERJ3GEYJ332V	RESISTENCIA CHIP PEL?CULA
R2619	ERJ3GEYJ332V	RESISTENCIA CHIP PEL?CULA
R2618	ERJ3GEYJ332V	RESISTENCIA CHIP PEL?CULA
R2271	ERJ3GEYJ332V	RESISTENCIA CHIP PEL?CULA
R2171	ERJ3GEYJ332V	RESISTENCIA CHIP PEL?CULA
R2883	ERJ3GEYJ334V	RESISTENCIA CHIP
R2585	ERJ3GEYJ334V	RESISTENCIA CHIP
R2584	ERJ3GEYJ334V	RESISTENCIA CHIP
R2611	ERJ3GEYJ391V	RESISTENCIA CHIP PEL?CULA
R2605	ERJ3GEYJ471V	RESISTENCIA CHIP PEL?CULA
R2625	ERJ3GEYJ471V	RESISTENCIA CHIP PEL?CULA
R2627	ERJ3GEYJ471V	RESISTENCIA CHIP PEL?CULA
R2634	ERJ3GEYJ471V	RESISTENCIA CHIP PEL?CULA
R2919	ERJ3GEYJ472V	RESISTENCIA CHIP PEL?CULA
R2916	ERJ3GEYJ472V	RESISTENCIA CHIP PEL?CULA
R2914	ERJ3GEYJ472V	RESISTENCIA CHIP PEL?CULA
R2912	ERJ3GEYJ472V	RESISTENCIA CHIP PEL?CULA

R2878	ERJ3GEYJ472V	RESISTENCIA CHIP PEL?CULA
R2846	ERJ3GEYJ472V	RESISTENCIA CHIP PEL?CULA
R2952	ERJ3GEYJ472V	RESISTENCIA CHIP PEL?CULA
R2925	ERJ3GEYJ472V	RESISTENCIA CHIP PEL?CULA
R2927	ERJ3GEYJ472V	RESISTENCIA CHIP PEL?CULA
R2921	ERJ3GEYJ472V	RESISTENCIA CHIP PEL?CULA
R2920	ERJ3GEYJ472V	RESISTENCIA CHIP PEL?CULA
R2602	ERJ3GEYJ472V	RESISTENCIA CHIP PEL?CULA
R2620	ERJ3GEYJ473V	RESISTENCIA CHIP PEL?CULA
R2804	ERJ3GEYJ473V	RESISTENCIA CHIP PEL?CULA
R2617	ERJ3GEYJ473V	RESISTENCIA CHIP PEL?CULA
R2207	ERJ3GEYJ473V	RESISTENCIA CHIP PEL?CULA
R2107	ERJ3GEYJ473V	RESISTENCIA CHIP PEL?CULA
R2805	ERJ3GEYJ473V	RESISTENCIA CHIP PEL?CULA
R2891	ERJ3GEYJ473V	RESISTENCIA CHIP PEL?CULA
R2899	ERJ3GEYJ473V	RESISTENCIA CHIP PEL?CULA
R2945	ERJ3GEYJ473V	RESISTENCIA CHIP PEL?CULA
R2946	ERJ3GEYJ473V	RESISTENCIA CHIP PEL?CULA
R2606	ERJ3GEYJ474V	RESISTENCIA CHIP PEL?CULA
R2615	ERJ3GEYJ561V	RESISTENCIA CHIP PEL?CULA
R2614	ERJ3GEYJ562V	RESISTENCIA CHIP PEL?CULA
R2502	ERJ3GEYJ563V	RESISTENCIA CHIP PEL?CULA
R2641	ERJ3GEYJ682V	RESISTENCIA CHIP PEL?CULA
R2642	ERJ3GEYJ682V	RESISTENCIA CHIP PEL?CULA
R2623	ERJ3GEYJ683V	RESISTENCIA CHIP PEL?CULA
R2651	ERJ3GEYJ820V	RESISTENCIA CHIP PEL?CULA
R2628	ERJ3GEYJ820V	RESISTENCIA CHIP PEL?CULA
R2903	ERDS1FVJ150T	RESISTENCIA
R2902	ERDS1FVJ120T	RESISTENCIA
R2954	ERDS1FVJ270T	RESISTENCIA
R2712	ERDS1FVJ220T	RESISTENCIA
R2903	ERDS1FVJ150T	RESISTENCIA
R2503	ERJ3GEYJ154V	RESISTENCIA CHIP PEL?CULA
R2242	ERJ3GEYJ223V	RESISTENCIA CHIP PEL?CULA
R2142	ERJ3GEYJ223V	RESISTENCIA CHIP PEL?CULA
R2908	ERJ3GEYJ331V	RESISTENCIA CHIP PEL?CULA
R2402	ERJ3GEYJ153V	RESISTENCIA CHIP PEL?CULA
R2302	ERJ3GEYJ153V	RESISTENCIA CHIP PEL?CULA
R2108	ERJ3GEYJ682V	RESISTENCIA CHIP PEL?CULA
R2103	ERJ3GEYJ682V	RESISTENCIA CHIP PEL?CULA
R2118	ERJ3GEYJ822V	RESISTENCIA CHIP PEL?CULA
R2113	ERJ3GEYJ822V	RESISTENCIA CHIP PEL?CULA
R2403	D0GB274JA008	CHIP RESISTENCIA
R2303	D0GB274JA008	CHIP RESISTENCIA
R2706	ERJ3GEYJ222V	RESISTENCIA CHIP PEL?CULA
R2705	ERJ3GEYJ222V	RESISTENCIA CHIP PEL?CULA
R2248	ERJ3GEYJ682V	RESISTENCIA CHIP PEL?CULA

R2184	ERJ3GEYJ822V	RESISTENCIA CHIP PEL?CULA
R2284	ERJ3GEYJ822V	RESISTENCIA CHIP PEL?CULA
R2316	ERJ3GEYJ682V	RESISTENCIA CHIP PEL?CULA
R2416	ERJ3GEYJ682V	RESISTENCIA CHIP PEL?CULA
R2707	ERJ3GEYJ102V	RESISTENCIA CHIP PEL?CULA
R2708	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2709	ERJ3GEYJ104V	RESISTENCIA CHIP PEL?CULA
R2710	D0GB224JA008	CHIP RESISTENCIA
R2711	ERJ3GEYJ101V	RESISTENCIA CHIP PEL?CULA
R2712	D0GB220JA008	CHIP RESISTENCIA
R2713	ERJ3GEYJ104V	RESISTENCIA CHIP PEL?CULA
R2714	ERJ3GEYJ124V	RESISTENCIA CHIP PEL?CULA
R2715	ERJ3GEYJ103V	RESISTENCIA CHIP PEL?CULA
R2701	D0GB225JA008	CHIP RESISTENCIA
R2702	D0GB332JA008	CHIP RESISTENCIA
R1	ERDS2TJ104T	RESISTENCIA
R2	ERDS2TJ104T	RESISTENCIA
R4	ERDS2TJ104T	RESISTENCIA
R3	ERDS2TJ221T	RESISTENCIA
R7	ERDS2TJ272T	RESISTENCIA CARBON
R10	ERDS2TJ391T	RESISTENCIA CARBON
R6	ERDS2TJ391T	RESISTENCIA CARBON
R9	ERDS2TJ391T	RESISTENCIA CARBON
R5	ERDS2TJ564T	RESISTENCIA
R11	ERDS2TJ684T	RESISTENCIA CARBON
R8	ERDS2TJ684T	RESISTENCIA CARBON
R6631	ERD2FCVG470T	RESISTENCIA
R6632	ERD2FCVG470T	RESISTENCIA
R6102	ERDS2TJ102T	R.CARBON
R6103	ERDS2TJ102T	R.CARBON
R6202	ERDS2TJ102T	R.CARBON
R6203	ERDS2TJ102T	R.CARBON
R6302	ERDS2TJ102T	R.CARBON
R6303	ERDS2TJ102T	R.CARBON
R6412	ERDS2TJ102T	R.CARBON
R6416	ERDS2TJ102T	R.CARBON
R5952	ERDS2TJ102T	R.CARBON
R6199	ERDS2TJ103T	RESISTENCIA
R6210	ERDS2TJ103T	RESISTENCIA
R6399	ERDS2TJ103T	RESISTENCIA
R6401	ERDS2TJ103T	RESISTENCIA
R6402	ERDS2TJ103T	RESISTENCIA
R6421	ERDS2TJ103T	RESISTENCIA
R6425	ERDS2TJ103T	RESISTENCIA
R6493	ERDS2TJ103T	RESISTENCIA
R6104	ERDS2TJ122T	R.CARBON
R6204	ERDS2TJ122T	R.CARBON

R6304	ERDS2TJ122T	R.CARBON
R6105	ERDS2TJ182T	RESISTENCIA
R6205	ERDS2TJ182T	RESISTENCIA
R6305	ERDS2TJ182T	RESISTENCIA
R6603	ERDS2TJ221T	RESISTENCIA
R6604	ERDS2TJ221T	RESISTENCIA
R6106	ERDS2TJ222T	R.CARBON
R6206	ERDS2TJ222T	R.CARBON
R6411	ERDS2TJ223T	RESISTENCIA
R6415	ERDS2TJ223T	RESISTENCIA
R6207	ERDS2TJ272T	RESISTENCIA CARBON
R6405	ERDS2TJ274T	R.CARBON
R6406	ERDS2TJ274T	R.CARBON
R6403	ERDS2TJ2R7T	RESISTENCIA
R6404	ERDS2TJ2R7T	RESISTENCIA
R6601	ERDS2TJ471T	R.CARBON
R6602	ERDS2TJ471T	R.CARBON
R6208	ERDS2TJ472T	RESISTENCIA CARBON
R6111	ERDS2TJ473T	RESISTENCIA CARBON
R6491	ERDS2TJ473T	RESISTENCIA CARBON
R6492	ERDS2TJ473T	RESISTENCIA CARBON
R6209	ERDS2TJ682T	R.CARBON
R6458	ERDS2TJ472T	RESISTENCIA CARBON
R6611	ERDS2TJ153T	RESISTENCIA
R6457	ERDS2TJ392T	RESISTENCIA CARBON

VARIABLE RESISTORS

S6101	EVQ21405R	TACT SWITCH
S6102	EVQ21405R	TACT SWITCH
S6103	EVQ21405R	TACT SWITCH
S6104	EVQ21405R	TACT SWITCH
S6105	EVQ21405R	TACT SWITCH
S6106	EVQ21405R	TACT SWITCH
S6201	EVQ21405R	TACT SWITCH
S6202	EVQ21405R	TACT SWITCH
S6203	EVQ21405R	TACT SWITCH
S6204	EVQ21405R	TACT SWITCH
S6205	EVQ21405R	TACT SWITCH
S6206	EVQ21405R	TACT SWITCH
S6207	EVQ21405R	TACT SWITCH
S6208	EVQ21405R	TACT SWITCH
S6209	EVQ21405R	TACT SWITCH
S6210	EVQ21405R	TACT SWITCH
S6301	EVQ21405R	TACT SWITCH
S6303	EVQ21405R	TACT SWITCH
S6304	EVQ21405R	TACT SWITCH
S6305	EVQ21405R	TACT SWITCH
VR6491	EVEKE2F3524B	CONTROL DE VOLUMEN

W5920	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5987	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5988	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5989	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5990	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
R5959	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
R5962	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
R5963	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5901	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5951	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5992	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5955	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5970	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W5986	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W5913	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5993	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5963	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5959	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5962	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5918	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5902	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5995	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5985	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
R5253	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
R5453	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5804	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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R5835	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5812	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5813	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5847	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5878	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5879	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W5880	W6NL-0	ALAMBRE DESNUDO ESTA?ADO

W5881	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W5819	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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R5803	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W2107	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2119	W6NL-0	ALAMBRE DESNUDO ESTA?ADO

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W2243	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W2114	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2505	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2504	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2503	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2369	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2357	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2168	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2169	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2226	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2240	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2241	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2265	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2289	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2316	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2317	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2318	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2320	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2362	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2374	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2390	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2425	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W2104	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W2118	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2126	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W2138	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W2223	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2242	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W2377	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W2507	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2508	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W2389	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2434	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W2113	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W2325	W6NL-0	ALAMBRE DESNUDO ESTA?ADO

W2334	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W2151	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W2382	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2501	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W2286	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2301	W6NL-0	ALAMBRE DESNUDO ESTA?ADO

W2312	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W2381	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2456	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W2157	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2158	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W2384	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W2283	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2141	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2356	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2101	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2111	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2298	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2355	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2277	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2275	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2373	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2163	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2128	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2511	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2303	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2304	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2512	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2339	W6NL-0	ALAMBRE DESNUDO ESTA?ADO

W2459	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2331	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2340	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2129	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W2112	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2207	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W2150	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
FJ1	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
FJ2	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
FJ3	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
FJ4	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
FJ5	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
FJ6	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
FJ7	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
FJ8	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
J1	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
J2	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
J3	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
J4	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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L6551	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
L6552	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
L6553	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
L6621	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
L6631	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
R6107	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
R6108	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
R6109	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
R6110	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
R6481	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
R6901	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
R6902	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
R6903	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6001	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6002	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6003	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6004	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6005	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
D6482	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
R6417	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
R6418	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
R6419	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
R6431	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6011	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6020	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6036	W6NL-0	ALAMBRE DESNUDO ESTA?ADO

W6038	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6049	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6050	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6090	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6991	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6994	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6035	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6036	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6037	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6039	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6040	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6041	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W6043	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6044	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6045	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W6048	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W6008	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W6010	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6013	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W6076	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W6082	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W6059	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6060	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6061	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6012	W6NL-0	ALAMBRE DESNUDO ESTA?ADO

W6016	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6017	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6018	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6019	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6031	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W6073	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6085	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6088	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6092	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W6022	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6023	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6024	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6025	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6027	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6028	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6029	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6030	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6062	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6069	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6071	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6065	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6067	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6068	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6026	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
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W6070	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6080	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6086	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6063	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6089	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6078	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6033	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6066	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6075	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6077	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6936	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6105	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
R6643	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
R6642	W6NL-0	ALAMBRE DESNUDO ESTA?ADO
W6104	W6NL-0	ALAMBRE DESNUDO ESTA?ADO

WIRES

W5950	REXX0325	9P (2.5MM) FLAT WIRE
W6555	REXX0324	9P (2MM) FLAT WIRE

CONDENSER

C2101	ECJ1VB1C105K	CERAMIC CONDENSER
C2120	ECJ1VB1C105K	CERAMIC CONDENSER
C2141	ECJ1VB1C105K	CERAMIC CONDENSER
C2142	ECJ1VB1C105K	CERAMIC CONDENSER
C2201	ECJ1VB1C105K	CERAMIC CONDENSER
C2220	ECJ1VB1C105K	CERAMIC CONDENSER
C2241	ECJ1VB1C105K	CERAMIC CONDENSER
C2242	ECJ1VB1C105K	CERAMIC CONDENSER
C2856	ECJ1VB1C105K	CERAMIC CONDENSER
C2626	ECJ2VF1C105Z	CONDENSADOR

CHIP JUMPER

R2181	ERJ3GEY0R00V	CHIP JUMPER
R2281	ERJ3GEY0R00V	CHIP JUMPER
R2311	ERJ3GEY0R00V	CHIP JUMPER
R2411	ERJ3GEY0R00V	CHIP JUMPER
R2582	ERJ3GEY0R00V	CHIP JUMPER
R2601	ERJ3GEY0R00V	CHIP JUMPER
R2652	ERJ3GEY0R00V	CHIP JUMPER
R2811	ERJ3GEY0R00V	CHIP JUMPER
R2892	ERJ3GEY0R00V	CHIP JUMPER
R2932	ERJ3GEY0R00V	CHIP JUMPER
R2933	ERJ3GEY0R00V	CHIP JUMPER
R2976	ERJ3GEY0R00V	CHIP JUMPER
R2977	ERJ3GEY0R00V	CHIP JUMPER
R2152	ERJ3GEY0R00V	CHIP JUMPER
R2252	ERJ3GEY0R00V	CHIP JUMPER
R2531	ERJ3GEY0R00V	CHIP JUMPER
C2281	ERJ3GEY0R00V	CHIP JUMPER
C2181	ERJ3GEY0R00V	CHIP JUMPER
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R2911	ERJ3GEY0R00V	CHIP JUMPER
R2913	ERJ3GEY0R00V	CHIP JUMPER
R2915	ERJ3GEY0R00V	CHIP JUMPER
R2917	ERJ3GEY0R00V	CHIP JUMPER
R2923	ERJ3GEY0R00V	CHIP JUMPER
R2926	ERJ3GEY0R00V	CHIP JUMPER
W2901	ERJ3GEY0R00V	CHIP JUMPER
W2902	ERJ3GEY0R00V	CHIP JUMPER
W2903	ERJ3GEY0R00V	CHIP JUMPER
W2904	ERJ3GEY0R00V	CHIP JUMPER
W2905	ERJ3GEY0R00V	CHIP JUMPER
W2906	ERJ3GEY0R00V	CHIP JUMPER
W2907	ERJ3GEY0R00V	CHIP JUMPER
W2908	ERJ3GEY0R00V	CHIP JUMPER

W2910	ERJ3GEY0R00V	CHIP JUMPER
W2911	ERJ3GEY0R00V	CHIP JUMPER
W2912	ERJ3GEY0R00V	CHIP JUMPER
W2913	ERJ3GEY0R00V	CHIP JUMPER
W2918	ERJ3GEY0R00V	CHIP JUMPER
W2919	ERJ3GEY0R00V	CHIP JUMPER
W2920	ERJ3GEY0R00V	CHIP JUMPER
W2921	ERJ3GEY0R00V	CHIP JUMPER
W2922	ERJ3GEY0R00V	CHIP JUMPER
W2923	ERJ3GEY0R00V	CHIP JUMPER
W2924	ERJ3GEY0R00V	CHIP JUMPER
W2925	ERJ3GEY0R00V	CHIP JUMPER
W2926	ERJ3GEY0R00V	CHIP JUMPER
W2927	ERJ3GEY0R00V	CHIP JUMPER
W2928	ERJ3GEY0R00V	CHIP JUMPER
W2929	ERJ3GEY0R00V	CHIP JUMPER
W2915	ERJ3GEY0R00V	CHIP JUMPER
C2283	ERJ3GEY0R00V	CHIP JUMPER
C2183	ERJ3GEY0R00V	CHIP JUMPER
R2704	ERJ3GEY0R00V	CHIP JUMPER
W2914	ERJ3GEY0R00V	CHIP JUMPER
W2916	ERJ3GEY0R00V	CHIP JUMPER

LEDS

D6458	B3AAA0000583	LED
D6457	B3AAA0000583	LED

OSCILLATORS

X2603	H0H720400007	CRYSTAL OSCILLATOR
X2802	H2B100500004	CERAMIC RESONATORS
X2602	H3F1065A0002	DISCRIMINATOR
X2801	H0A327200115	37.768 KHz XTAL
Z2602	G2BAD0000003	BOBINA AM
Z5950	ERZV10V511CS	ZNR

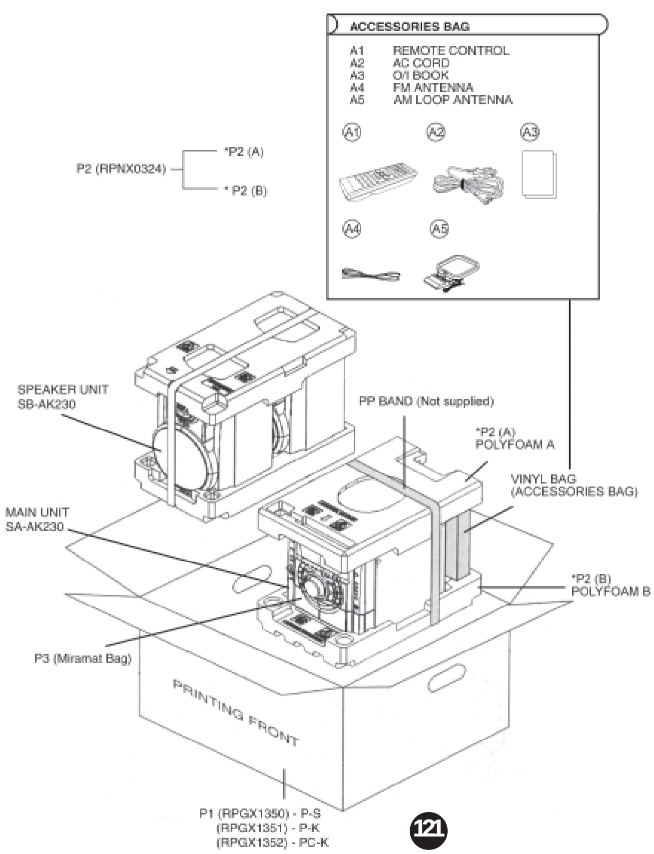
	RJBX0433A-2	PCB TRANSF. TM43/53
	RJBX0434B-1	PCB PODER TM23
	RJBX0415A-2	PCB MAIN TM23/43/53
	RJBX0066B-2	PCB TUNER PACK
	RJBX0414A-2	PANEL PCB TM23/43
RL5950	K6B1AEA00015	RELEVADOR
T5951	RTP1H3E002	TRANSFORMADOR DE RESPALDO

	DN83K	DIABOND
	T8E538AD	FLUX
	RZBM0003-1	ADHESIVO 444-2
	TB-2217-H	ADHESIVO CHIP BONDER 20ML
	T8EC026AD	SOLVENTE
	T2KA01810	SOLDADURA EN ROLLO
	T2KD00500	SOLDADURA EN BARRA
	RSC0027-3	BLINDAJE

23.5 Packing Materials& Accessories Parts List

Ref. No.	Part No.	Part Name & Description PACKING MATERIALS	Remarks
P1	RPGM0189	PACKING CASE	[M]P-S
P2	RPNM0149B/T	POLYFOAM	[M]
P3	RPFM0009-A	MIRAMAT BAG	[M]
		ACCESSORIES	
A1	EUR7710020	REMOTE CONTROL	[M]P-S
01-E-1E—	UM3PA/3	R/C BATTERY COVER	[M]
A2	SJA168-1A	AC CORD	[M]
A3	RQTM0130	O/I BOOK (Sp)	[M]P-S
A4	RSA0006-L	FM ANTENNA	[M]
A5	N1DAAAA00001	AM LOOP ANTENNA	[M]

23.6 Packaging



1 Connection of the Speaker Cables

- Be sure to connect speaker cables before connecting the AC power supply cord.
- The load impedance of any speaker used with this unit must be 5Ω.
- Be sure to connect the cable from the right speaker to the right terminal and the cable from the left speaker to the left terminal.

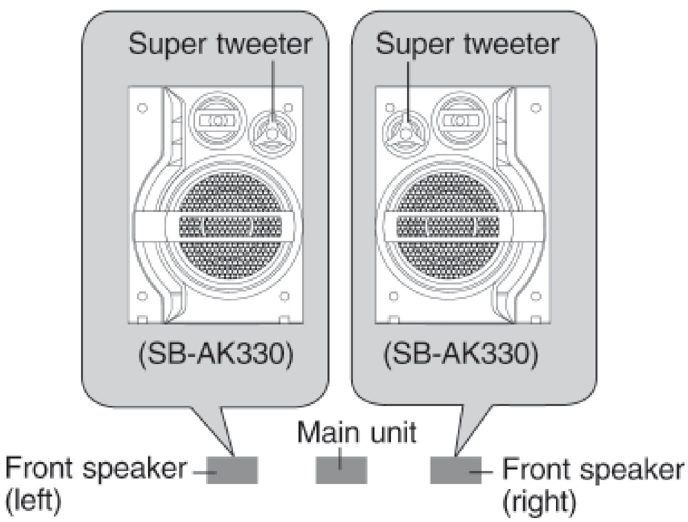
Strip off the outer covering, and twist the center conductor. Make sure the bare ends of the wires are not unravelled. (If they are, twist them tight again.)

Insert the wire to the rear panel of the unit and close the lever.

Notes :

- To prevent damage to circuitry, never short-circuit positive (+) and negative (-) speaker wires.
- Be sure to connect only positive (red) wires to positive (+) terminals and negative (black) wires to negative (-) terminals.

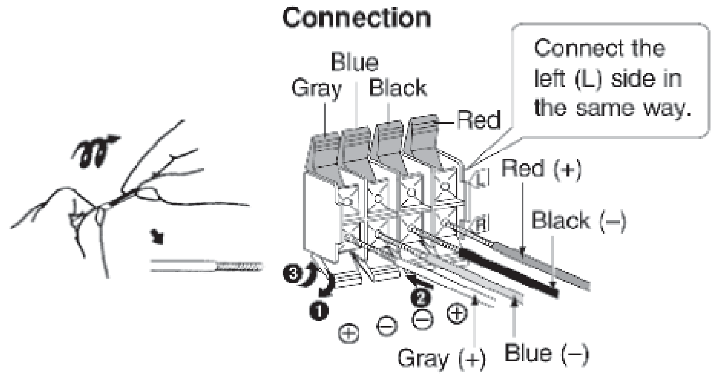
Placement
Place the front speakers so that the super tweeter is on the inside.



Notes :

- Keep your speakers at least 10 mm (13/32”) away from the system for proper ventilation.
- These speakers do not have magnetic shielding. Do not place them near televisions, personal computers or other devices easily influenced by magnetism.
- You cannot take the front net off the speakers.

Connection



Use only the supplied speakers.
The combination of the main unit and speakers provide the best sound.

Using other speakers can damage the unit and sound quality will be negatively affected.

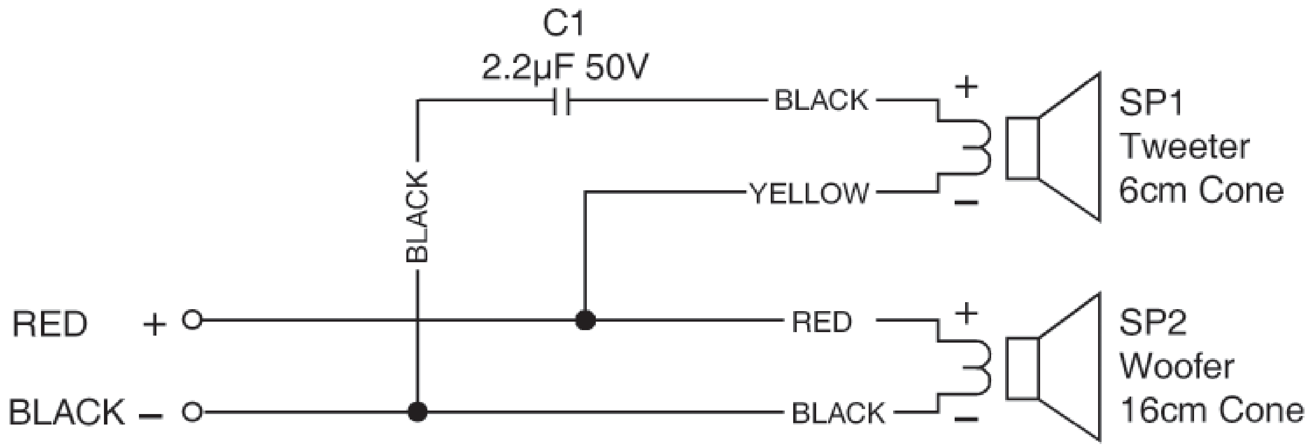
Notes on speaker use

- You can damage your speakers and shorten their useful life if you play sound at high levels over extended periods.
- Reduce the volume in the following cases to avoid damage.
- When playing distorted sound.
- When adjusting the sound quality.

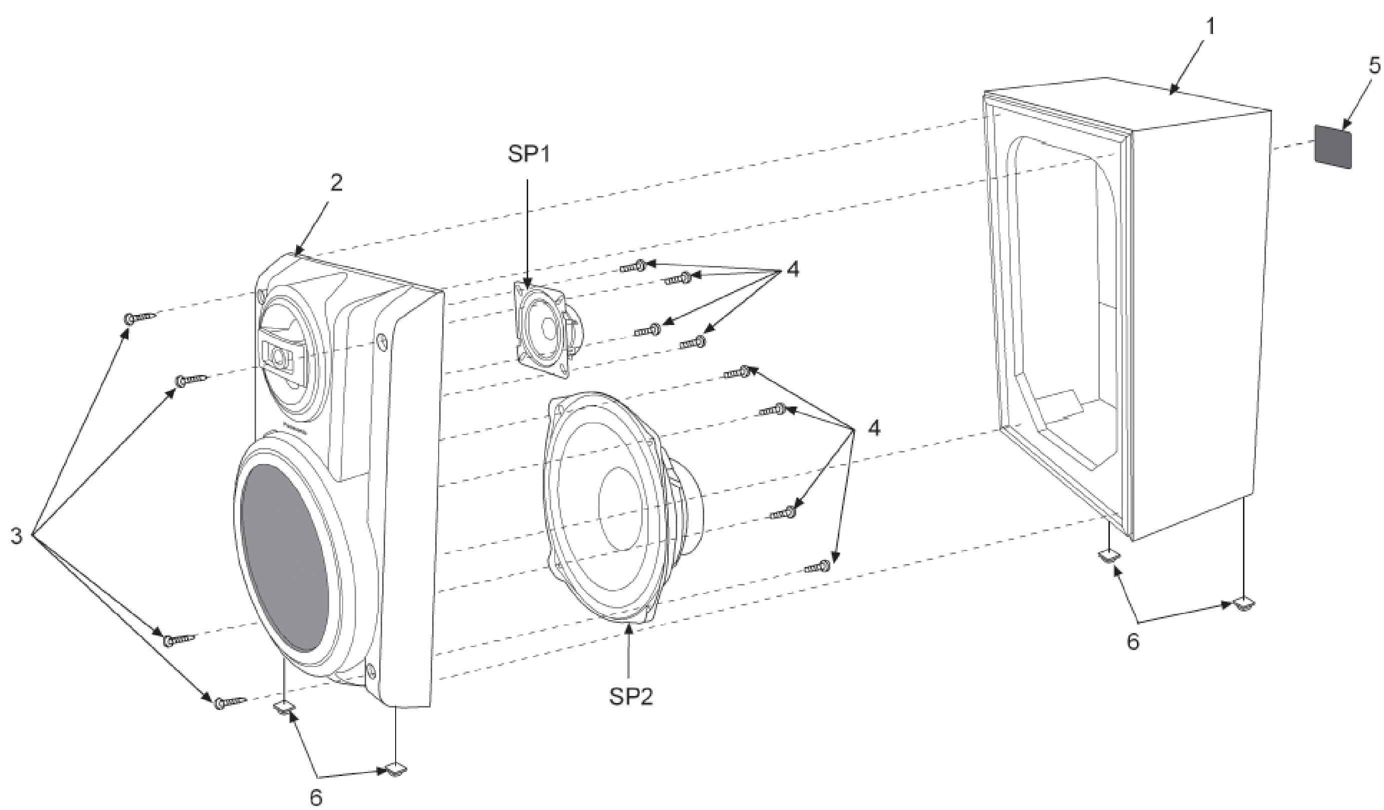
Caution

- **Use the speakers only with the recommended system. Failure to do so may lead to damage to the amplifier and/or the speakers, and may result in the risk of fire. Consult a qualified service person if damage has occurred or if you experience a sudden change in performance.**
- **Do not attach these speakers to walls or ceilings.**

2 Connection of the Speaker Wiring



3 Cabinet Parts Location



4 Replacement Parts List

Notes :

- Important safety notice :
When replacing any of these components, be sure to use only manufacturer's specified parts shown in the parts list.

- [M] markings in the Remarks columns indicates parts supplied by **PAVCSG .**

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	RKPM0090	SPK CABINET ASS'Y	[M]S
2	RYPM0183	FRONT PANEL ASS'Y	[M]S
3	XTB4+16AFZ-A	SCREW (FRONT PANEL)	[M]
4	XTB4+10G-A	TAPPING SCREW	[M]
6	RKA0072-KJ	LEG CUSHION	[M]
		PACKING MATERIALS	
P1	RPNM0153B/T	POLYFOAM	[M]
P2	RPFM0017-A	MIRAMAT	[M]
		SPEAKERS	
SP1	EAST6PH08A6	TWEETER	[M]S
SP2	EAST16PL41F6	WOOFER	[M]S

5 Packaging

